

A STUDY OF FEMALE CIRCUMCISION IN EASTERN NIGERIA:
ITS MEDICAL SIGNIFICANCE

INTRODUCTION

Nigeria is today the largest Colony and Protectorate under the Union Jack since India gained her independence. It will be re-called that Lagos, today the Federal Capital of Nigeria was created a British Colony in 1862. In January 1900, after cancellation of the Royal Niger Company's Charter, the Protectorate of Northern Nigeria came into being. In the same year, the territory formerly known as the Niger Coast Protectorate was re-named Southern Nigeria Protectorate.

In 1906, the Colony of Lagos and its protected territory were amalgamated with the Protectorate of Southern Nigeria under one administration, with Lagos as the seat of the Government. In 1914, by Letters Patent and Order in Council, the Colony and Protectorate of Southern Nigeria and the Protectorate of Northern Nigeria were amalgamated and designated the Colony and Protectorate of Nigeria, with Sir Frederick (later Lord) Lugard as the Governor-General.

Various constitutional changes have taken place since Lord Lugard's days. The latest Constitution, the

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Macpherson Constitution has created three main "Regions", the Eastern, the Western, and the Northern Regions, plus a Federal Region made up of Lagos and the Southern Cameroons.

The present study deals with a tribal custom, Female Circumcision - in the Eastern Region of Nigeria. Reference to the map on the last page will make clear the extent of this Region which is bounded on the West by the River Niger, on the East by the Political boundary between the Southern and Northern Cameroons on the one hand and the Provinces of Ogoja and Calabar on the other.

On the North it is bounded by a portion of territory south of the River Benue, a tributary of the Niger, and on the South, by the Atlantic.

It is not quite a hundred years since Nigeria came under British rule, but the impact of Western culture and civilisation on the African has produced revolutionary transformations. New ideas are replacing the old. With "new ambitions and aspirations, and a new outlook on life it is almost incredible how short a time is needed for the obliteration even of the memory

of old-world customs and of ancient landmarks.....
We in Nigeria have, I consider great ethnological and anthropological responsibilities to Science, having regard to the fact that the rapidity of the changes... is such that many matters of interest are to be regarded as shadow shapes, vanishing from the face of the earth. If they be not recorded... with skill and care at the present time, they will be lost to human knowledge forever." (Hugh Clifford Governor of Nigeria - 1919-1925).

This extract from the Foreword by Sir Hugh Clifford to Meek's "Northern Tribes of Nigeria" epitomises the reasons and the need for a careful study, on a scientific basis, of the customs of indigenous natives.

There is no doubt that some of the customs of various tribes described in ethnographic and anthropological works of say twenty years ago are no longer practised or observed. Female Circumcision in Nigeria is a custom that is as old as the hills. The present investigation attempts to study this age - old custom from various angles, principally from the view point of the medical man. Here and there, a few ethnological data have been inserted in so far as they help to

make the treatise continuous, and it is hoped, interesting.

CHAPTER ONE

References to the Literature on the Subject of Circumcision in general

(a). The Biblical view: of Circumcision (no distinction is made as to whether females were ever circumcised) is clearly expressed in "A new Commentary on Holy Scripture including the Apocrypha" edited by Charles Gore et alia (1928). These authors interpret the findings in Genesis Chapter 17 verses 10 to 14 to be that circumcision was practised not only by the Hebrews, but that their neighbours practised it, as also the Egyptians (cf Jos. cap. 5 verse 9 and Jeremiah cap. 9 verse 26). The Philistines on the other hand did not circumcise, and were 'held in contempt' by those who practised it. Puberty was the period for the custom.

Among the Arabs, it was performed at about the age of thirteen preparatory to marriage. Its social significance was that it admitted the individual, in the case of men, into the manhood of the nation. (Vide Exodus 4. 24-26).

The Jews regarded circumcision as a "binding

obligation". No uncircumcised person could hold a high religious office. In the early legal codes of the Israelites, no particular laws were made about circumcision. Later, however, circumcision was enforced, as a prerequisite rite to be observed by those seeking admission to the Jewish Church. Among the Jews, circumcision was performed in infancy; it was regarded as a symbol of early dedication of the child to God for Divine protection. It is believed that early baptism of infants as practised in Christian Churches today, and infant circumcision as was practised by the Jews may have a common connotation, that is dedication to God for protection.

In Joshua Chapter 5 verse 2 to 12 the relation of circumcision to the Passover is mentioned; here also it connotes an "act by which the tribes dedicate themselves to God, as a preliminary to the Passover." The uncircumcised was regarded as "unclean" and in Exodus 12, 48 we find - "No uncircumcised person shall eat thereof."

(b). Anthropological references to this custom are numerous. Of interest in connection with this discourse may be mentioned P. Talbot's "Ethnology of the peoples of Southern Nigeria" (1926), "Tribes of the Niger Delta" by the same author (1928); Talbot surveyed the custom as

it was practised in his days throughout the greater part of what was then known as Southern Nigeria but which is today split into Western and Eastern Regions of Nigeria. In his "Niger Ibos" Dr. Basden describes the custom as he found it among the Ibo speaking tribes south of the Niger. C.K. Meek in his "Northern Tribes of Nigeria" also makes fleeting remarks about this custom which is hardly, if ever practised by the Northern Tribes. His reference to the distribution of the practice appeared to me to be inaccurate. He states that female circumcision is "also a custom among the Ijaws...".

The Ijaws are usually classified into two groups (a) Western and (b) Eastern. The present investigation revealed that the Western Ijaws who are near the Urhohos, Cobos and Benin people circumcise sporadically. The Eastern Ijaws do not circumcise at all.

Prof. W.D. Wallis, one time Professor of Anthropology in the University of Minnesota in his "Introduction to Anthropology" states that the rite of circumcision is connected with the worship of a deity, "Elegba" among the Yorubas of Nigeria and "appears to be a sacrifice of a portion of the organ which the god inspires to insure the well-being of the remainder" - in other words, female

circumcision was an act of propitiation to the goddess of Fertility, in order that the circumcised woman may be fertile, and have easy labours. Whether or not these views are tenable in the light of our knowledge of the basic medical sciences and Pathology will be seen later in the discourse.

Other references are to be found in Frazer's "Golden Bough", Burton's "Wandering in West Africa", "Niger Expeditions" and Oldfield's "Expeditions in the Interior of Africa" quoted by Dr. Basden, and Sylvia Leith-Ross's fleeting remarks on the custom in her "African Woman" - a study of the Ibos of Nigeria (1938). Of all these references, Basden's work appears to me to be fairly comprehensive; it embraces such aspects of the study as its distribution in Nigeria and the world as a whole, methods of circumcision and treatment, the reasons for circumcision, the factors which have brought about a reduction in its incidence in certain districts in Eastern Nigeria, the results of circumcision (it would appear that medical opinion was probably consulted here ! - with apologies) and the deductions he made of the probable origin of the Ibos from a similarity of their customs, including female circumcision, between these

people and the Israelites. In all these references, the approach to the subject was that of the ethnologist or anthropologist.

(c). Medical references to the literature on the subject include:

a) Remondino's "History of Circumcision from the earliest times to the present" (1891). The author states that the practice was observed in Arabia, Egypt, by the Saliva Indians of the Orinoco, and the Gallinas of Sierra Leone; he gives a medical reason for the necessity to circumcise females.

b) Extracts from "Sonnini's Travels" (Caledonian Medical Journal, Vol. VI 1904-1906) indicate that the Egyptians, Abyssinians, the Ethiopians, and the Hottentots of South Africa circumcised their women on account of abnormal hyperthropy of the nymphae (q.v. infra for "Hottentot Apron"). The operator was always a woman who performed it at "the commencement of the rise of the Nile..." Religious groups who observed it were the Mohametans and the Copts or Catholics, wishing to double their claims to paradise...." Sonnini succeeded in witnessing an operation on the genitalia.

(c) Beadnell (1905) in his "Circumcision and

Clitoridectomy as practised by the natives of British East Africa" observed that some of the natives excised both clitoris and labia minora, and others the clitoris alone; puberty was the age for the operation, and no woman was eligible to marry unless clitoridectomised, nor would her child have any social status. He believed that the operation was performed to propitiate a local deity.

d), e) and f): Stewart (1912) writing on "Circumcision of the preputium clitoridis", Freeman (1914) on "Circumcision in the masturbation of female infants", and Lane (1940) on the "Remarkable results following circumcision" strike a common note - that adhesions of the preputium clitoridis give rise to a multitude of complaints - enuresis hysteria, nymphomania, frigidity and even psychosis. All these Americans claimed satisfactory results following excision of the prepuce and breaking down adhesions (if that is what they mean by clitoridectomy), and laudably advise it.

The only mention of this practice in Britain occurred in London some seventy years ago. The surgeon was highly censured, the profession frowned upon the practice and condemned it. (Sequeira).

British observers include :-

Worsley's (1938) article entitled "Infibulation and female circumcision - A study of a little known custom", describes the operation of infibulation as practised by the Sudanese, and then gives the distribution of practice of infibulation circumcision and introcision, with a note on the complications. He concludes by noting the part played by the trained native midwife in "steadily securing a mitigation in the severity of the practice."

h) Brassington (1932) describes the custom in his "Notes on female Circumcision as practised by the Ameru" - a tribe in the Kikuyu Province of Kenya. Reasons for perpetuating the custom are given, and he adds a note on the complications following circumcision.

l) Sequeira writing in the "Lancet" of 1931 on "Female Circumcision and Infibulation" deals with such aspects of the practice as,

- i) The geographical distribution in the world.
- ii) The varieties of the operation.
- iii) Age of Circumcision.
- iv) The operator.
- v) Theories as to the origin and meaning of circumcision.
- vi) The medical and legal aspects of the practice.
- and
- vii) the future - what may be done to stop the practice.

His article contains suggestions made by the Duchess

of Atholl, M.P. as to what steps should be taken by Colonial Governments to prohibit the practice.

j) Laycock's. (1950) contribution to the subject is contained in his "Surgical aspects of female circumcision in Somaliland". Like the last author he describes the varieties of the custom, and the surgical and obstetrical complications, not only of circumcision, but also of infibulation and defibulation. He also gives a note on the post-operative use of myrrh as a dressing by the natives.

k) Wilson and Sutherland's "Female Circumcision and the age of the Menarche" B.M.J., June, 1955. Their findings are analysed in a later Chapter.

REMARKS

Our knowledge of the subject has not advanced since these authors contributed their quota. None of them described the pre- and post- operative methods of treatment of circumcision. None of them appeared to have seen a case say a few hours after the operation (with the possible exception of Sonnini) and to have followed the case from then till healing took place, and observed the condition of the genitalia a year or two after the formation of scars.

Methods of haemostasis as practised by the natives were not discussed fully - and yet haemorrhage, sometimes very profuse was mentioned as a regular complication. None of these investigators analysed the claims made by natives as to the reasons for perpetuating the custom - such for example is the claim that circumcision abolishes libido, or that in a magical way it increases fertility.

In my study of the custom as I observed it among certain tribes in Nigeria, I have endeavoured to show in what ways the Nigerian custom is similar to, or differs from, the practice in other countries, with statistical analysis of various complications associated with the practice, and also other aspects of the practice not fully discussed by other writers.

CHAPTER TWO

WHY WAS THE PRESENT STUDY UNDERTAKEN?

The study was undertaken for a variety of reasons. As stated in the Introduction, it is essential to investigate indigenous customs on a scientific basis and to record one's findings before these customs disappear as the result of the impact of foreign cultures.

b) A number of cases of circumcised women presented

certain obstetric and gynaecological problems which appeared to the investigator to have a direct or indirect relationship to circumcision, and therefore demanded a closer study than had hitherto been done. Similarly, certain social problems appeared to have a bearing on female circumcision which warranted investigation.

c) The investigator is of the opinion that the various reasons advanced by natives for perpetuating the custom required analysis in the light of our knowledge of Anatomy, Physiology and Pathology, and physic factors which are known to modify or control human behaviour; and therefore to determine whether or not, the custom is to be encouraged or condemned.

d) Much of the study on Nigerian customs had hitherto been done and written up by foreigners who are bound to interpret these customs and their findings in the light of their own culture alone. It was therefore, thought necessary to examine the custom of female circumcision from the view point of a medical man who is a Nigerian.

e) Foreign investigators of native customs are often faced with certain difficulties. One of these is the

language problem. A European who seeks information about native customs or practices quite often does so through an intermediary - the native interpreter, who may himself not be competent to translate to the European investigator all the information that has been given him by the native informant. Furthermore, the motive of the foreign investigator of native customs may be suspected or his intentions misconstrued by the native. Quite often the native is afraid to give the true answer to a question asked by the "whiteman", and so he may give a false answer. To fathom the native's mind and interpret his thoughts correctly, the educated African is, in my judgment the most suited for such investigations.

CHAPTER THREE

Method of Study

It may be mentioned here that the average Medical Officer engaged in the Nigerian Government Service has to combine his duties in a hospital (usually situated in the Administrative Headquarters of a Division) with supervision of Local Government or Native Administration dispensaries and Maternities dotted about the villages in the rural areas. These duties entail tours in

A waterfall in Kafanchan, Nigeria.



The Shrubs "Baushen Fadama" and "Garbarua"
grow along the banks of this waterfall.

Their leaves when dried and powdered are
used as haemostatics in circumcision.

(See Text)

launches, canoes, in kitcars, or on motor cycles, and could be quite exciting as well as informative. It was in the course of these tours that I met a male Hausa "barber" or "circumciser", who was travelling from village to village, armed with his instruments, on his self-appointed mission. I met him in a village situated near a waterfall. He showed me certain shrubs near the waterfall. The leaves of these shrubs are used to procure haemostasis after circumcision. He showed me his instruments (q.v. infra), and described his technique of circumcision. I was also fortunate to meet a female circumciser in a village along the Cross River who, having been a former patient of mine, took me into her confidence and described the operation, and showed me her instruments. No circumciser dare practise his or her profession before a Government official, especially a doctor or an Administrative Officer, for fear that he or she might be handed over to the Police. The operation is therefore a guarded secret. I was, however, fortunate in one of my tours to be consulted by a girl who was circumcised some few hours previously, and from whose excised parts, haemorrhage occurred freely. She narrated her experience trembling, but vividly. The

circumciser can control minor forms of haemorrhage; . sometimes cases of uncontrollable haemorrhage are seen and treated in hospitals. The after effects of circumcision are treated in both Government and Mission Hospitals.

The average type of rural hospital in which I did most of my investigation and treatment consists of 80 to 100 beds. A quarter of these may be assigned to midwifery cases, some to babies, and the remainder shared equally between male and female patients in separate wards. Attendance at these hospitals is seasonal, but obstetric emergencies are many, and are due, in a number of cases, to bad circumcision.

The Outpatient attendance ranges from 50 to 150 patients a day in a rural hospital and from 200 to 400 in the larger towns, e.g., Aba and Port Harcourt where I also conducted part of my investigation. The staff is made up of locally trained midwives and nurses who hold the Government Certificates to practise their profession. In the larger hospitals (Port Harcourt, Aba, Enugu, etc.), there are also European and African Nursing Sisters, all of whom had taken part in one way or the other in my investigation.



An African Nursing Sister
The Maternity, Aba.

An English trained African Nursing Sister
at Aba General Hospital (Maternity Unit),
examining a patient before removal to the



The cases in this series were collected by me from five Government Hospitals, Local Government or Native Administration Dispensaries and Maternities situated in various parts of Nigeria. I had worked in all these hospitals between the years 1951-1955, and supervised the Dispensaries and Maternities.

The cases were gynaecological, obstetrical, surgical and medical patients; a few were postmortem subjects. Patients were questioned, examined and treated by the investigator himself. In all cases, full case histories were taken and examinations were carried out. A typical example of the investigator's case history is given below :-

1. Name of Patient.
2. Age.
3. Address.
4. Home Town.
5. Tribe.
6. Religious Denomination.
7. Age at which she married.
8. Age at which first child was born.
9. Where was the first child born (a) at home (b) in an institution.
10. Who delivered her of the first baby - a trained midwife

10. (contd.) or an untrained midwife?
11. How long did the labour last?
12. Was it a difficult labour?
13. Was the first child born alive? If it died, was it still born, or how soon after ~~its~~ birth did it die? Were resuscitative measures applied (i.e. for asphyxia)?
14. Did the labour require any form of operation, i.e. Caesarean Section, Forceps delivery or Episiotomy?
15. Was there any operative repair of her perineum after labour?
16. How long was she confined to bed after delivery?
17. Is there anything in her history suggestive of Puerperal sepsis due to infection of tears.
18. Her pelvic measurements especially the Diagonal and True conjugates, and the Outlet, its antero-posterior and transverse diameters.
19. Is she circumcised or uncircumcised. If she is circumcised, is it partial or complete?
20. What reasons does she advance for female circumcision in her tribe or locality? Are there any associated rites?
21. How many children has she given birth to? Ages and place of birth. No. dead. No. alive.
22. Pelvic examinations by the investigator: In respect of pelvic measurements, particular attention was paid to the Diagonal conjugate from which the True Conjugate could be deduced. The shape of the pubic arch, the transverse diameter of the outlet, the general stature and physique of the individual and the available space in the pelvis were noted.



Photograph of the interior of a female ward in the General Hospital, Aba, Nigeria. The Nursing Sister in the photograph assisted in interpreting questions and answers.

In the absence of X-ray pelvimetry, reliance had to be placed on a careful examination of the Diagonal Conjugate, the pubic arch and outlet.

In order to eliminate pelvic contraction as a factor of difficult labour in those who did not deliver in institutions, all the cases in the series were selected. Only those with a minimum of $4\frac{1}{2}$ " True Conjugate, and 4" transverse at the outlet were taken for investigation. The following measurements may be taken to represent the average pelvic diameters in the series :-

Ant. Interspinous: $8\frac{1}{2}$ "

Intercristal: $9\frac{1}{2}$ "

Ext. Conjugate: 7"

Diagonal Conjugate:
 $4\frac{3}{4}$ " to 5"

Estimated True conjugate: $4\frac{1}{4}$ " to $4\frac{1}{2}$ ".

Transverse at outlet: 4" Pubic arch: greater than 90 degrees.

BRITISH FIGURES:
(Average)

Interspinous: 9 to 10"

Intercristal 10 to 11"

Ext. Conjugate: $7\frac{1}{2}$ "

Diagonal conjugate: 5"

Estimated true conjugate: $4\frac{1}{2}$ " Outlet: Transverse Diameter-
 $4\frac{1}{2}$ ".

A comparison of these measurements taken at the bedside show that the external measurements are greater in the British series than in the Nigerian series. However

the really important measurements such as the Diagonal conjugate from which the true conjugate is estimated, and the transverse and antero-posterior measurements at the outlet approach the British figures.

Other examinations were done to note (a) type of circumcision (q.v. infra) (b) the condition of the circumcised area - if a parous woman, what is the condition of the vulva or vagina as regards evidence of old tears or contractions, cystocele, rectocele or complete prolapse. What is the tone of the Levatores ani and other muscles of the pelvic floor? The whole body is then examined for presence or absence of keloids (Vide infra).

During the course of history taking, patients were asked - if circumcised, about such things as the effect of circumcision on their libido, and their general attitude towards the practice.

Difficulties and how they were solved.

There is no doubt that in such a delicate subject as this which concerns the most jealously guarded region of her body, a lot of tact and patience are needed to elicit any useful information from the African woman. Where the investigator comes up against a local dialect problem, the



Picture shows a labour room in the Maternity Unit of the General Hospital, Aba, Nigeria.

A Nursing Sister and three midwives are on duty.

male interpreter is often not very helpful. A female interpreter, preferably a midwife or a nurse attached to the unit was found most useful.

I have already alluded to the difficulty of getting mathematically accurate pelvic measurements in the absence of X-ray pelvimetry.

Much of the information on human sexual behaviour has been gleaned from the monumental work of investigators on this study; such for example is the work on female sexual behaviour by Kinsey and his associates of Indiana University, U.S.A. The investigator's plea for including some of their findings on American women in a study of Nigerian women is that the basic factors which govern sexual behaviour are the same in all races of mankind, although the patterns of behaviour of one individual may vary from that of another as a result of such modifying influences as heredity, environment, education, one's state of health, etc.

It may be mentioned here that statistical data on studies in the African are not readily obtainable. The figures given below were obtained from the record of the Maternity Units attached to the General Hospitals in which the investigator served as a resident Medical Officer, and



Picture shows an African Nursing Sister
with two midwives taking histories of
antenatal cases (four patients are shown).
General Hospital, Aba, Nigeria.

also from records in the Teaching Hospital (Nurses and Midwives) at Aba, Eastern Region.

TABLE A:

Average Birth Weight of 1,000 Babies in Primipara:

<u>Aba Maternity:</u> 6 - 6½ lbs.	7½ lbs. (Queen Charlotte's <u>European Figures:</u>
Other Maternities in	Obstetrics)
Eastern Nigeria ditto:	7th ed. Churchill London.

Although these birth weights are given, it has been stated by some authorities that the "risk of disproportion and the ease of childbirth depend more on the size of the foetal head than on birthweight" (Leith in Combined Textbook of Obstetrics and Gynaecology).

TABLE B:

Incidence of the various Foetal Positions:

<u>Eastern Region of Nigeria:</u>	Ø	<u>United Kingdom:</u>
Cephalic: 94.5%	Ø	Cephalic: 96%
Breech: 4.0%	Ø	Breech: 3.5%
* Others: 1.5%	Ø	Others: 0.5%
* Oblique lie. Transverse	Ø	(Chapter 10. Page 170
position, etc.	Ø	Combined Textbook of
	Ø	Obstetrics and
	Ø	Gynaecology 5th ed.
	Ø	Livingstone Edin.)



An African Nursing Sister is taking the Obstetric and past histories of a patient prior to removal to Labour Ward. General Hospital, Aba, Nigeria. A midwife is collecting instruments for sterilisation.

These figures show a high incidence of vertex positions at birth, the first vertex being the commonest, and abnormal presentations e.g. transverse lie etc., being the lowest. Most of the investigator's cases delivered in their own houses under the supervision of "untrained" native midwives. It may be surmised from the above figures that most of such labours were probably normal vertex positions; and therefore if an abnormality arose, it was probably the odd case of a "face" or a "brow", or perhaps a breech. These "abnormal" positions would affect the circumcised as well as the uncircumcised in fairly equal proportions.

CHAPTER FOUR

Geographical Distribution of the custom

The practice of female circumcision appears widespread throughout many continents. One of the most comprehensive references to its distribution is that given by Sequeira (Lancet Nov. 7., 1931). His list embraces various parts of Africa, Asia, America, Australia, and even Europe. In Europe only one sporadic case has been recorded - "The Skoptozy (or circumcisers). They are a Russian sect who use it to ensure a state of perpetual virginity, quoting Saint Matthew (xix. 12)

as their authority" - Worsley - Journal of Obstetrics and Gynaecology 1938. Sequeira records (1931) "It is interesting in this connexion to recall that about 50 years ago clitoridectomy was performed by a London surgeon for hysteria and erotomania. The operation aroused much opposition, and was condemned by the profession generally as unscientific".

The custom is unknown in Japan, China and India; there is probably a religious basis. In some of the places mentioned by Sequeira and Worsley, excision of the clitoris and labia minora (circumcision) may or may not be combined with other mutilating procedures such as Introcision, Infibulation and Defibulation (Laycock 1950), Beadnell (1905), Worsley (1938) and Brassington (1932).

According to Meek "we find it among the Basa, Basange, Gade, Kekande, Mada, Shuwa, and Yoruba". "It is also a custom among the Ijaw and the people of Benin. It was practised by the ancient Egyptians and Copts, and still is a custom among the Arabs, Galla, Abyssinians, Mosi, Mandingoes and natives of Kordofan". As mentioned earlier on, the practice of female circumcision is sporadic among the Western Ijaws, while the

Eastern Ijaws do not observe the custom at all. Among the Yorubas, female circumcision is hardly practised by those born in Christian homes, especially in Lagos, and in Egbaland i.e. Abeokuta area, Ijebu Ode and Ijebu Remo. It is practised in the following places in Yoruba - land:- Ogbomosho, Oyo, Ibadan, Ilesha, Akure, Ife, Ondo, Offa, Oshogo, Ede and parts of Ilorin.

It is to be noted that there are exceptions in all these cases, i.e. although the majority of females of, say, Ogbomosho are circumcised, there are some who for various reasons to be discussed in a subsequent chapter, may not be circumcised.

The present study revealed that female circumcision is practised, on a large scale in the Eastern Region of Nigeria. The incidence of the custom is considered on a provincial basis. Reference to the provincial map of Nigeria will show the places referred to. (See last page).

Owerri Province: Nearly 98% of the natives of Owerri Province were found to be circumcised. The study showed that any native of this Province who is not circumcised was probably not born within the Province, and had probably naturalised "in a foreign environment" where female circumcision is tabooed. There was, for example,

an uncircumcised Owerri woman who was born and bred in Jos where most of the foreign elements are uncircumcised. There are however parents who would go very long distances to get a "barber" to circumcise their daughters, if one was not available locally. Other exceptions to the rule were girls who, although born and bred within their home town where the custom is observed, are not circumcised, as they come from Christian homes where the custom is forbidden.

Onitsha Province: About 99% of the free-born of Onitsha Town are uncircumcised, whereas about the same percentage of females outside Onitsha town circumcise regularly irrespective of their religious beliefs. The factors influencing the practice are discussed in a later chapter. Suffice to say here that the early introduction of Christian ideas in Onitsha Town has done a great deal to prevent the practice amongst the Christians there. Why the Church has not succeeded just as well in the outlying districts is not easy to decipher. It has been contended that the real Onitsha native is not of Ibo origin, but may have migrated from a part of the Western Region of Nigeria, possibly near Benin area where circumcision is not practised. If that is the case, then

it is perhaps not the Church that has influenced the real Onitsha native, but, like the Israelites during their days of slavery in Egypt, had stuck to the customs of their land of birth. There are, ~~for~~ example, other customs e.g. facial or body scarifications which are common among the Ibos which the Onitsha native does not practise.

Rivers Province: This Province is made up of Portharcourt Township and its environment, Ahoada Division, Brass, Degema and Ogoni Division. Portharcourt is a cosmopolitan township where various nationalities are to be found: one cannot therefore generalise on such a place. In Ahoada Division, nearly 50% of the population are of Ibo origin, and true to their tribe, practically all these circumcise. The remainder in this Division who are non-Ibos do not circumcise.

The real natives of Brass, Degema and Ogoni Divisions do not circumcise.

Calabar Province: is made up of Calabar, Abak, Eket, Eniong, Ikot Ekpene, Opobo and Uyo Divisions. The tribal groups in these various Divisions are (1) The Efiks i.e. the natives of Calabar and Eniong. (2) The Ibibiosie. the natives of Eket, and Uyo Divisions. (3) The Anangs

i.e. Ikot Ekpene, and Abak. (4) The Ijaws i.e. the natives of Opobo. 85.8% of Efiks are circumcised. About 81.2% of the Ibibios are also circumcised. 85% of the Anangs are circumcised. Nearly all true Opobo born women i.e. of Ijaw origin do not circumcise.

It is interesting to note here that the true natives of Opobo do not circumcise. The original settlers of Opobo came from Bonny in Degema Division, where female circumcision is tabooed. Although they now find themselves in a new environment they still observe the custom of their original home - Bonny (Cf. Onitsha natives, ante).

Ogoja Province: The Administrative Divisions in this Province are Abakaliki, Afikpo, Ikom, Obubra, Ogoja, and Obudu.

Nearly 90% of the natives of Abakaliki and Afikpo Divisions being of Ibo origin are circumcised. In Ikom Division are to be found (1) The Ekoi Clan: 77.8% of whom are circumcised (2) The Ofutop Clan: 95% are circumcised (3) Olulumos: nearly 98% are circumcised and (4) Other minor Clans: 100% of whom are circumcised (5) about 90% of Boki people do not circumcise.

In Obubra Division, the Mbembes, the Yakurrs

and the Bahumunus do not circumcise. All others circumcise uniformly. Formerly most people in Itigidi were circumcised. The practice has ceased since the last quarter of a century.

The investigator had the opportunity to study the effect of female circumcision on libido in women of the Olulumo, Ofutop, Ekoi and Afunatam clans of Ikom and Obubra Division, as, in these two Divisions, the practice is observed as a pre-marital ritual. Most women before circumcision have had sexual contact with men, and were therefore better suited to appraise the effect, if any, of circumcision on their sexual responsiveness and libido, before and after the circumcision than those women who were circumcised, say eight days after birth. In these two Divisions, the investigator had the unique opportunity of getting the details of the operation from a female circumciser, and to be present in the 'Outing' ceremony from the 'Fattening Room' of young women who were circumcised three months previously.

In Obudu in Ogoja Division, practically every one is circumcised with the exception of a few of the smaller clans who live on the border between Northern Nigeria and Eastern Nigeria.

-----oOo-----

CHAPTER FIVE

Reasons for Female Circumcision

Remondino (1891), Stewart (1912), Lane (1940) and Freeman (1914), all Americans, had performed operations on the clitoris i.e. breaking down adhesions or removing the praeputium clitoridis for a number of psychosomatic complaints in girls and women. In Britain (as mentioned already) the only surgeon who practised clitoridectomy for erotomania and hysteria (Sequeira 1931) some 70 years ago was highly censured. Worsley (1938) obtained the following reasons :- (a) as an aid to chastity by reducing sexual passion (Clitoridectomy) (b) For cleanliness, especially among the Bantus (c) to enhance fertility (d) "to preserve mother and child from dying". (e) Among the Hottentots and Abyssinians and Egyptians in whom labial hypertrophy is common - to prevent its overgrowth (cf "Hottentot Apron"). (f) It gives a legal status to the circumcised mother and her children. Brassington (1932) adds that among the Ameru, it is "fashionable" for a woman to be circumcised; that it may also have a religious significance. It is also a custom which has been handed down from generation to generation by the older women, and therefore it must be accepted implicitly. Beadnell (1905) and Sequeira (1931)

are of the opinion that the operation is done as an act of sacrifice "of part of the body for the salvation of the whole", to propitiate a local deity of fertility (q.v. ante - Wallis).

The operation when combined with infibulation was designed to ensure fidelity in a woman when her husband was absent - a practice which, as Sequeria puts it, is "reminiscent of the mediaeval knight who was said to take with him the key of his wife's girdle of chastity". For the Biblical view, see ante.

Here in Nigeria the answers given varied from one locality to another and from tribe to tribe. In most places, the reason offered was that female circumcision was a custom of the land which had been handed down from the dim past to the present day - a custom which must be observed at all costs. Dr. Basden, in his "Niger Ibos" observes :- "And what constitutes a greater incentive in that she knows no man will marry her unless she has submitted to the ordeal (of circumcision); he would not risk his dowry money on one who had neglected to conform to an institution believed in and practised for untold generations". This statement is to be taken with a grain of salt. There are many Ibos today, indeed

males in other tribes where female circumcision is practised, who marry uncircumcised women from other towns. The custom of female circumcision is not as widespread today as it was in Dr. Basden's days.

Another reason offered is that uncircumcised women are unclean. This was the Jewish conception, indeed that of the ancient Hebrews and Egyptians. The Ibos, Efiks and Cross River natives contend that the smegma which lurks between the folds of the labia minora and L. majora is produced by the labial folds and that various diseases tend to form in them if they are not excised. Furthermore that in the uncircumcised the clitoris and labia minora protrude beyond the level of the L. Majora and look untidy. Dr. Basden, quoting Seabrook in "Jungle Ways" page 55 states inter alia "The operation consists solely of excising the surplus folds inside the lips of the vagina, a measure which had become ritual, but must certainly have had as its basic purpose commonsense facility for cleanliness just as in the case of the male circumcision". I do not agree with Seabrook's views. The elongated foreskin of the male ~~open~~ or the penis can certainly harbour a lot of filth, and so encourage the formation of para-phimosis,

and penile ulcers and possibly squamous carcinoma; the labia minora are such small cutaneous folds and the clitoris is such a diminutive structure that they cannot prevent any woman from her normal toilet of the area. The sebaceous secretions from these structures are no greater than those secreted by, say the axillary sweat glands, and we do not have to excise the axillary skin in order to be tidy!

A third reason given is that the uncircumcised woman is easily eroticised. That circumcision deprives her of an organ or organs which in their opinion are responsible for the libidinous instincts in a woman and the responsiveness of the female during coitus. Meek in his "Tribes of Northern Nigeria" also states that!.... it (Circumcision) is believed to be an aid to chastity.

Full analysis of the effect of circumcision on the responsiveness of the female during coitus, and on libido is given in a subsequent chapter under "Sexual Frigidity". Suffice to say here, that in the light of our knowledge of the anatomical, hormonal, neural and psychologic factors which are concerned in sexual response and libido, the view that female circumcision acts as an aid to chastity is untenable.



A Nigerian woman with one of her five children.

All were delivered in one of our hospitals.

She comes from an area where Circumcision is
tabooed. She has always had easy, uneventful
deliveries.

Among the tribes of the Cross River who circumcise their women, the practice is a pre-marital ritual of great social significance. It is regarded as a type of "Initiation Ceremony" which elevates her from the pre-marital carefree status into the respected and dignified marital state.

There are those who believe that the clitoris and labia minora narrow down the vaginal outlet, and so obstruct labour and that circumcision widens the outlet.

The Yorubas and some Ibos believe that the baby in the process of labour will die if any part of it comes into contact with either of these structures. (cf. Worsley 1938 - q.v. ante).

Neither of these views is tenable. There are millions of uncircumcised women all over the world, (Nigerian uncircumcised women included) who give birth to live babies. It is not clear how much soft, elastic structures as the clitoris and labia minora could obstruct labour if the pelvic measurement are normal. These genital organs subserve not only sexual, but a reproductive function.

Excision of the clitoris and labia minora, as will be seen in another chapter, narrows down the vaginal

outlet and gives rise to various obstetric and gynaecological complications.

Circumcision as an act of propitiation:

In certain parts of Yorubaland, and among certain Ibos (Afikpo and Bende Districts in particular) it is believed that the goddess of fertility should be propitiated by besmearing blood from the excised clitoris and labia minora, and depositing these structures, on her altar. Thereafter, the circumcised woman will be fertile and have no difficulty in labour. I have already referred to this belief as contained in Professor Wallis' "Introduction to Anthropology". The many cases of absolute sterility seen in our Gynaecological Units of circumcised females and the number of difficult labours which result from circumcision put these beliefs at naught.

"The heathen in his blindness bows down to wood and stone" (From the Hymnal Companion:)

CHAPTER SIX

Age of Circumcision

Reference to the literature on the subject shows that it varies very widely: The eighth day (Abyssinians), Somali from three to four years; In Egypt - nine to ten years; In Australia - fourteen to fifteen years. In most East

African tribes it is performed at about puberty, and in others a few days before marriage.

The age at which various tribes circumcise their women in Eastern Nigeria is summarised in the subjoined Table which is modified from Talbot's summary for comparison with the investigator's findings. I have indicated here and there where the present practice differs from the practice as it was when P. Amaury Talbot wrote his book - 1926.

TABLE C

Tribe	Village:	Time of Circumcision (Talbot's findings)	Time of Cir- cumcis- sion. Braide's findings
Ekoi	Ikom	Before marriage	Before marriage
	Akparabong	" "	" "
	Etomi	" "	" "
	Bendege Ayuk	" "	" "
	Ejagam	In infancy, before marriage or after first child.	" "
Olulumo	Okuni	Before marriage	" "
	Okanga No.2:	" "	" "
	" 1:	" "	" "

Tribe	Village	Time of Circumcision (Talbot's findings)	Time of Circumcision Braide's findings.
Ofutop	Nkum (North)	1 year to 3 years after birth	Before marriage
	Nde	Before marriage	" "
Iyala		4-6 years after birth	" "
Atam	Oftunatam	4-6 years after birth	" "
Ekuri	Akunakuna	At men ^u strat [^] ion	In Infancy. Usually 8 days after birth.
Yakurr	{ Ekuri	3 years after betrothal	Do not circumcise now
	{ Assiga	" "	" "
	{ Nko	" "	" "
Bahumunu	Ediba	Do not circumcise	Do not circumcise.
Igbo	Itigidi	Before marriage	Do not circumcise now.
Boki	Yakoro	Before marriage	Do not circumcise.
	Uge	Do not circumcise	Do not circumcise.
	Bete	Before marriage	Before marriage
	Boki	At one year or after	Do not circumcise.

Tribe	Village	Time of Circumcision (Talbot's findings)	Time of Circumcision Braide's findings.
Ibos	Onitsha Natives Asaba	3 - 7 years After birth 1 month - 10 years	Donot circum- cise at all. In infancy usually 8 days.
	Kwale	Do not circumcise	Do not cir- cumcise.
	Ikwerre	4-8 days after birth	Usually 8th day.
	Ishielu	Before marriage	Usually 8th day.
	Isu	4th day.	4th day to 8th day.
	Agbor	Before child is weaned or sometimes after birth of first child.	Do not cir- cumcise.
	(Okposi	Before marriage.	Some in infan- cy, others before marriage.
	(Edda		
	(Afikpo		
	Ngwa	-----	8th day after birth.
	Awka	3-7 days	1st week after birth.
	Oratta	4 days	1st week of birth.
Ibibios (Anangs)		Some when small some before marriage	In infancy i.e. 8 days to 2 months. A few premari- tally. A few do not cir- cumcise.

Tribe	Village	Time of Circumcision (Talbot's findings)	Time of Circumcision Braides findings.
Ibibio	Effiat	-	1 year to 10 years.
	Ekket	Before marriage	From 1 year to Puberty.
	Ebionnan		" " "
	Ididepp	Before marriage	Before marriage
	Itam	Before marriage	Before marriage
	Enyong	Before marriage	1-10 years
	Mbolli	Before marriage	1-10 years
	Uduan	-	1-10 years
	Kwa(Itu)	Before marriage	1-10 years
	Oron	Before marriage	1-10 years
Kaje	Northern Tribes of Nigeria	<u>Meek's Findings</u> Do not circumcise	Do not circumcise
Kagoro	"	"	"
	"	"	"
	"	"	"
Hausa	"	"	"
	"	"	"
Fulani	"	"	"
Yorubas	Abeokuta	Contd. over.	Do not circumcise.

Tribe	Village	Time of Circumcision(Talbot's Findings)	Time of Circumcision Braide's Findings.
Yorubas (Contd.)	Lagos		Do not circumcise.
	(Egbas)		" "
	Ilorin		Circumcise 8th day.
	Offa		Do not circumcise.
	Oshogbo		" "
	Ondo		Circumcise 8th day.
Ibos (Contd.)	Bende Dist.	8 days - 1 month	1st week or soon after.
	Okigwi "	8 days - 1 month	
	Owerri "	8 days - 1 month	
	Okebe	At menustration	1st week - 1 month. Some at menustration.
	Oguta	8 days after birth	1st week after birth.
Ogonis	Bori	No record	Do not circumcise.
	Tai	No record	" "
	Kano	No record	" "
	Taborgh	No record	" "
	Wiyakara	No record	" "
	Bodo	No record	" "
Ijaws		Contd. over.	

Tribe	Village	Time of Circumcision (Talbot's findings)	Time of Circumcision Braide's finding.
Ijaws (Contd.) (Eastern)	Kalabaris	Do not circumcise	Do not circumcise
	Okrikans	1-7 days (lower)	" "
	"(Eastern)	Before marriage	" "
	Brass	No record.	" "
	Bile	No record.	" "
	Bonny	No record.	" "
	Opobo	No record.	" "
Efiks	Calabar)	5-6 years or in Fattening Room	2 mos. to 10 years some in fattening room.
	Enyong)	1 Fattening Room	This latter is disappearing. More in Infancy than in later years.
Ibibios		Some when small some before marriage.	In infancy. i.e. 8 days to 2 months. A few premaritally.

CHAPTER SEVEN

Method of Circumcision.

A brief account is given of the various mutilating

CHAPTER SEVEN

Method of Circumcision(continued)

operations done on the external genitalia in other parts of the world in order to present a contrast between these and the Nigerian practice.

(a) In Eastern Mexico, a simple incision is made in the pudenda with a flint knife.

(b) Excision of the clitoris (part or whole i.e. Clitoridectomy) may or may not be combined with excision of the labia minora, is performed in many parts of Africa.

(c) Introcision: is an operation in which the vagina is cut open at an early age; it is to be differentiated from "Defibulation" which is described below. Introcision was practised by the Australians on their women, and "Ariltha" or splitting open the urethra on their males.

(d) Infibulation: which is practised by the races in the North-East of Africa, the Mohammadan Malays of Asia, and was in vogue in ancient Arabia is a savage practice. The clitoris and labia minora are first excised, and then the excised margins are united by means of thorns, clips made of bamboo material, or some native suture material

(Sequeira, Laycock et al). Just a small space is left in the pudendal area for micturition and menstruation. Before

the girl marries, the vulva is forcibly stretched to allow coitus to take place. After delivery of a child, the parts are again stitched back.

(e) Defibulation: is an operation which is the opposite of Infibulation. It consists of making a small short incision to separate the fused labia minora, by either a woman or the girl's husband. The object of the operation is to enable the husband to engage in the act of coitus (if the previous operation of Infibulation had narrowed down the vulva unduly); it is also done on women in labour, when the foetal head cannot go through the narrowed vaginal outlet (Cf. Episiotomy in obstetric practice) (Sequeira, Laycock et al).

Brassington records that the Skoptozy or Russian Circumcisers did very severe mutilating operations which included excision of the labia majora.

The methods of female circumcission employed by circumcisers in Nigeria are those described by a female circumciser, and a male Hausa "barber" referred to in Chapter 3 under "Method of Study". I was able to determine the extent of the operation from cases recently circumcised (not healed) and those who came to our hospitals either as gynaecological, antenatal or labour

cases.

The mutilating operations of Introcision, Infibulation and Defibulation are not practised in Eastern Nigeria.

The operation is considered under two headings :-

- (a) Circumcision in the Infant.
- (b) Circumcision in the adult.

The parts and extent of the external genitals removed vary from tribe to tribe. Whereas in the male, the operation of circumcision for phimosis consists in removing the praeputium, in female "Circumcision", the following parts may be excised :-

- 1. The Clitoris alone.
- 2. One or both labia minora without removing the clitoris.
- 3. The clitoris and the labia minora.

(1) Where the clitoris alone is removed, ^a portion of its distal third including the glans is usually excised.

A modification is to excise nearly the whole of the corpus clitoridis, but the "barber" or "circumciser" hardly extends as far as the suspensory ligament of the clitoris, nor does she excise the crura.

(2) Where the labia minora are excised, these structures may be removed partially or completely. The various

types are shown diagrammatically on another page.

(3) In group three, part of the body of the clitoris and the labia minora as far down as their extensions into the posterior commissure are excised.

The term "Circumcision" appears to me inappropriate. A more descriptive term is "Clitoridectomy" where the clitoris alone is excised, "labiectomy" or "labia-minorectomy" where the labia minora alone are removed, and "Clitorido-labia-minorectomy " for the wholesale removal of these structures.

In this series, the term "complete circumcision" is applied to those cases in which the labia minora and clitoris are both excised. "Partial circumcision" is applied to those in which either the clitoris alone, or labia minora alone are excised.

Talbot in his "Southern Nigeria" suggests that the labia majora are excised in certain parts of Eastern Nigeria. In none of my cases were the labia majora excised, and no information has so far been received to the extent that the labia majora are ever removed in female circumcision in any part of Nigeria. Excision of these structures (L. majora) will necessitate the use of haemostats which these natives do not possess.

(A)

Circumcision in Childhood:

This is an easier operation for the barber than the operation in an adult.

Preparation of the patient: The genitalia may or may not be cleansed with water. The mother or any other woman, sitting on a low stool or on the ground holds the child between her knees, with the child's thighs abducted over the mother's knees. To prevent struggling, the child's hip may be controlled by the mother's thighs pressed together, and the child's arms held firmly by the mother. An assistant steadies the two legs of the child.

The operation: The "barber" facing the genitalia in a squatting position, picks up the clitoris with the thumb and index finger of the left hand. The clitoris and labia minora may first be smeared with ashes from the fireplace, a practice which is said to aid in taking a firm grip of these rather 'slippery' structures. The operator uses a 'scalpel' made of metal by a village blacksmith. It is sharpened, but not sterilised prior to the operation. The clitoris is picked up and put on the stretch, and the barber excises as much as she deems necessary. Where the labia minora are to be removed, the operator cuts down on both sides of the genitalia, removing the corpus clitoridis, the glans, and the praeputium and frenulum

and the two labia minora as far as their posterior extensions, removing all in a single piece. As the "barber" makes his excision, an assistant squeezes warm water from a cloth on to the operation area, and occasionally swabs the excised area. Skilful barbers complete their operation in less than three minutes.

Haemostasis: As no haemostats (artery forceps) are used, the bleeding has to be stopped by the use of juices or the extract of leaves which have styptic properties. In Ibo-land, the juice of "Agbiligba" leaf or "Anwiliniwa" leaf (Basden) is applied to the bleeding parts.

Among the Yorubas, the fluid from the tail end of the edible snail is allowed to drop on the excised area. This fluid is said to possess astringent or styptic properties; my informant also ascribed analgesic property to the snail's fluid.

In Northern Nigeria the juice of a tree called "Baushen Fadama" or an extract of the leaves or pulverised bark of the shrub "Gabarua" is used to stop bleeding. These two shrubs belong to the same family as *Acacia senegal*, the juice of which possesses astringent properties mainly because of its arabic acid -

$C_6H_{10}O_5$.

Antisepsis: Among the Yorubas, the bark of a tree known as "Obo" is pulverised and sprinkled on the operated area, a quarter to half an hour after the excision. This powder is said to possess antiseptic properties.

Post Operative Treatment: Hausa barbers use the powdered pods of "Gabarua" (Vide supra). It keeps the operated area dry. On the 4th day after operation, warm water is run gently on to the parts to soften the powder. This is cleansed off with warm cloth, the parts are dried, and fresh "Gabarua" powder is sprinkled on the parts. This treatment is given until the 7th or 8th day when the wound heals by first intention.

Among the Ibos, Efiks, Yorubas and Cross River natives post operative treatment consists of dressing the wound with warm palm oil or kernel oil, applied with a feather, from the first post operative day until the 8th day when healing should take place. Before oil is applied the operated area is swabbed with hot cloth and then dried. Where there are no post operative complications, healing takes place in eight to ten days. Oiling is said to prevent the excised areas from sticking, but in my observation, it did not succeed in doing so

uniformly. (q.v. ante - Laycock on the use of myrrh in East Africa).

(B) Circumcision in an Adult:

The only difference in the operation on grown up persons is that the subject is laid flat on the ground (usually in the backyard) in the recumbent position. Several stalwart persons, usually females are needed to keep the hands, legs and thighs and head of the person to be operated upon, under control. The thighs and legs are abducted, but not flexed, as in the latter position the limbs cannot be controlled when the patient struggles. The buttocks may be raised on any soft object. The patient's face is masked prior to excision of the labia and clitoris.

My informant, a Hausa barber demonstrated his technique on a small boy. The technique of the operation in the adult differs from that in the child in so far as persons are required to hold down the patient. The post operative treatment is as in the child.

The operator listed the following points in favour of circumcision in infants :- (a) Pain is not felt much by the infant. (b) Bleeding from the excised area is minimal. (c) The amount of clitoris and labia minora

to be excised is small and therefore easily removed.

(d) The child is easily controlled on the laps of its mother.

In the adult the reverse is just the case.

Comments: (a) Instruments used are not sterilised, before and after operation. They are just washed in water to remove any traces of blood, and replaced in their sheaths or containers.

(b) No anaesthetic of any sort is used. I was informed that the powdered "Obo" bark alleged by the Yorubas to have analgesic property has only astringent properties. In an infant 4 to 8 days old, the sensation of pain is not highly developed, but in an adult, the excision must be extremely painful, inciting a lot of struggle on the part of the patient, and the barber may inflict wounds on parts she did not intend to touch with her "scalpel". The shock which is an invariable concomitant in the adult must be due, quite apart from the free haemorrhage, to marked stimulation of the Thalamus and the Sensory cortex.

I shall refer presently, to the immediate and remote post operative complications of female circumcision.

Incantation before operation: Among the Yorubas, the

operator invokes the aid of the goddess of fertility - "Elegba", before operation - "Bisimilayi" which means "May the deity help me".

The fee charged for operation varies from 2/- to 10/- either in cash or in kind.

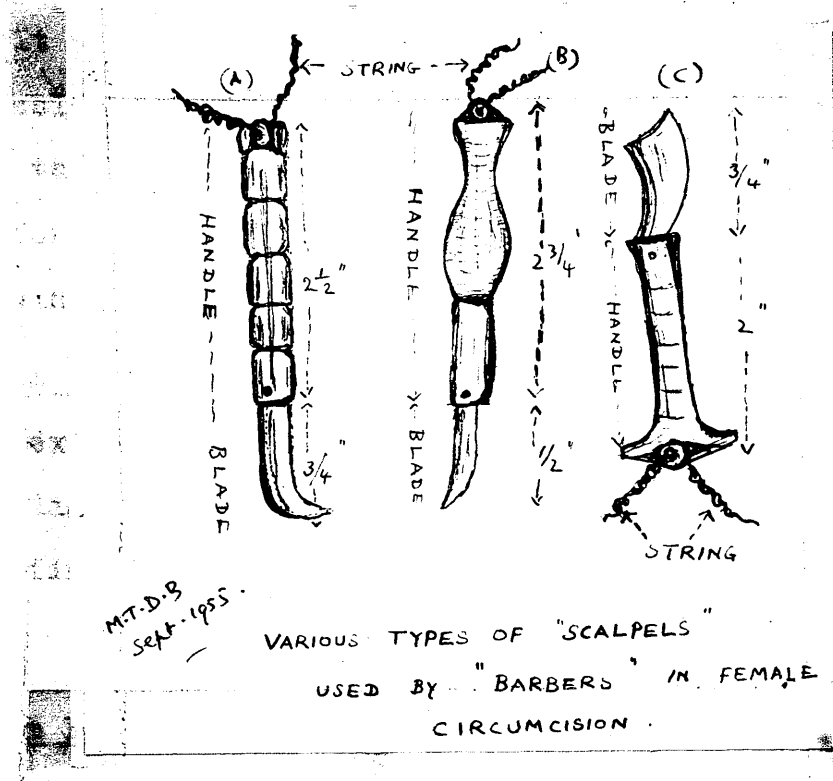
Dimensions of instruments used:- Those of the "scalpel" shown me are given below :- Length (of handle and blade) - $2\frac{3}{4}$ " to $3\frac{1}{4}$ ". Length of handles: 2" - $2\frac{3}{4}$ ". Length of blade: $\frac{1}{2}$ " - $\frac{3}{4}$ ". Width of blade: $\frac{1}{2}$ ". The blade is hinged on the handle like a penknife.

The "scalpel" is kept in a sheath of native leather.

The method and technique of female circumcision remind one of surgery in pre-anaesthetic and pre-Listerian days.

I have given a fairly detailed account of the operation as none of the authors mentioned described it fully- e.g. such aspects as pre- and post- operative treatment (except the reference to the use of myrrh in Somaliland, by Laycock (1950), and the use of "Kedi" barks to treat sepsis complicating Defibulation. Worsley mentions that haemorrhage from the excised area is dealt with by means of a "clamp" made of split-cane adjusted to grip the raw

excised edges together, the ends of the "clamps" being tied and left there for two to three weeks. Most of the authors describing the East African practice state that during the operation, many women stand around and yell in order to drown the cries of the girl under operation. This is not done in Nigeria. Most girls I have questioned affirmed that as circumcision was an important ceremony in their village, they were expected to face the temporary ordeal with fortitude.



These are diagrams of "Scalpels" used by the Hausa "barber" mentioned in Chapter 3. When not in use, they are kept in leather sheaths (made of native material) and strapped round the arm. These "scalpels" are made by native blacksmiths.

In other parts of the world, razors or other forms of knives are used.

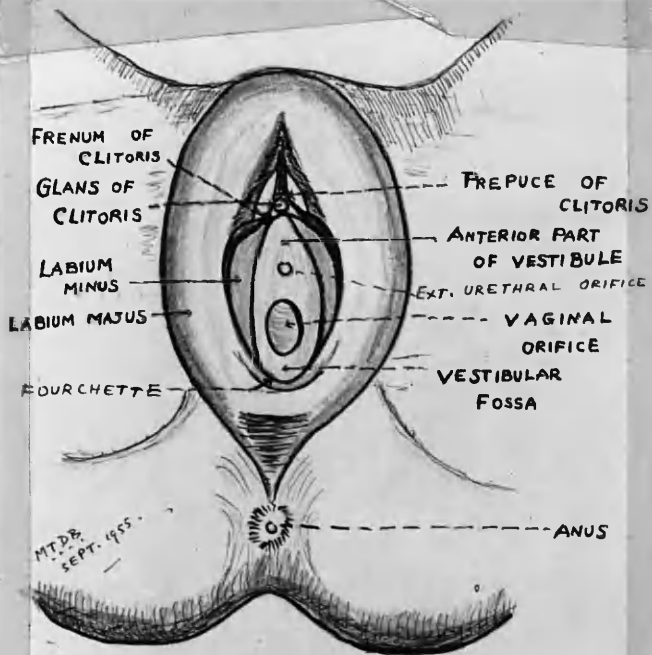


DIAGRAM A
UNCIRCUMCISED, NORMAL

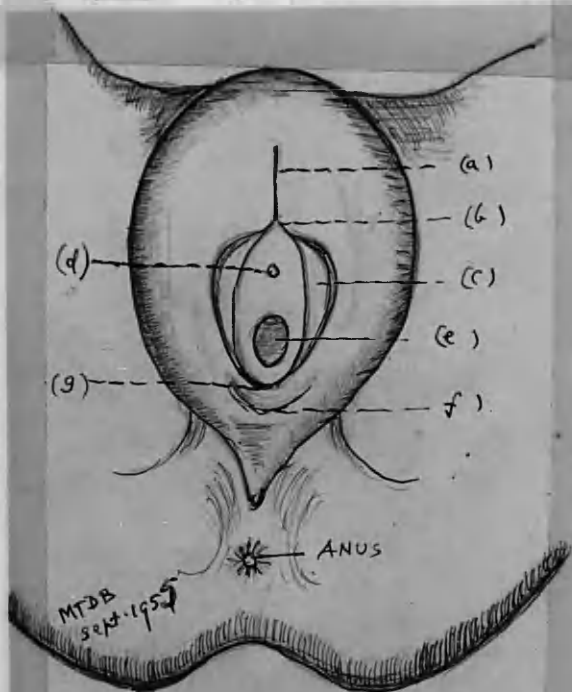


DIAGRAM B.

Partial Circumcision

CHAPTER EIGHT:

Description of the external genitalia of circumcised nulliparous women.

It was not possible to obtain the services of a professional medical photographer in any of the places where the investigations were carried out. I have therefore made drawings to depict the parts seen on examining these cases.

Diagram A: Shows the normal appearance of the uncircumcised external female genitalia for comparison with the genitalia of circumcised persons. The parts are as one would find in other races of mankind, as shown by the labels.

Diagram B: Shows the external genitalia in which the whole clitoris has been excised (corpus, glans, prepuce and frenum) (a) is a linear scar indicating the original position of the clitoris (b) is the original position of the frenum; It is now replaced by scar tissue. (c) - Labium minus (d) - Ext. Urethral orifice (e) - Vaginal orifice (f) - is the lower part of the Labia Majora (g) is the fourchette. This is a variety of Partial circumcision.

Diagram C: /

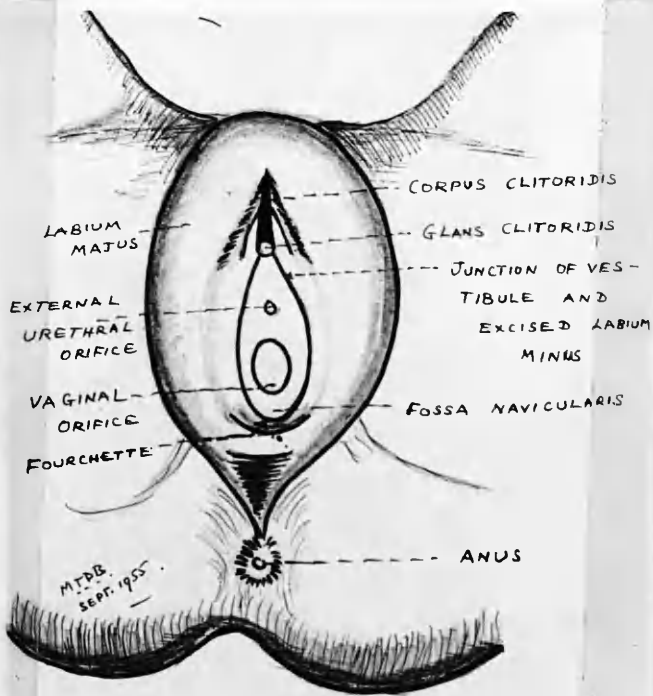


DIAGRAM C
Partial Circumcision

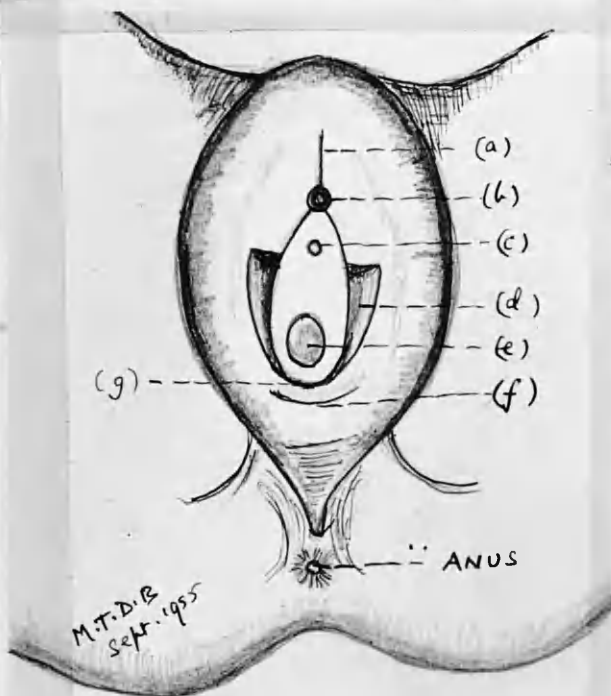


Diagram D.

Partial Circumcision

Diagram C: Here both labia minora have been excised, as also the prepuce and the frenum. The other parts are intact. This is another variety of "Partial Circumcision".

Type B is scarcely accompanied by remote complications. Haemorrhage both primary and secondary may be profuse.

Type C is usually followed by various complications mentioned in the text.

Diagram D: This is another variety of Partial Circumcision. The corpus clitoridis has been excised, as also the upper 1/3 of both labia minora. The glans, usually atrophic, has been deprived of the prepuce or hood and the frenum. (a) - linear scar of excised corpus clitoridis. (b) - atrophic glans. (c) - Ext. Urethral orifice. (d) - lower two thirds of labium minus not excised. (e) - Vaginal orifice. (g) - fourchette. The complication in this type is usually haemorrhage.

Diagram E: The body of the clitoris has been excised, and is represented by the linear scar, - (a) The glans, (b) - is not excised. (c) - represents the upper one-third of each labium minus, not excised. (d) - is a

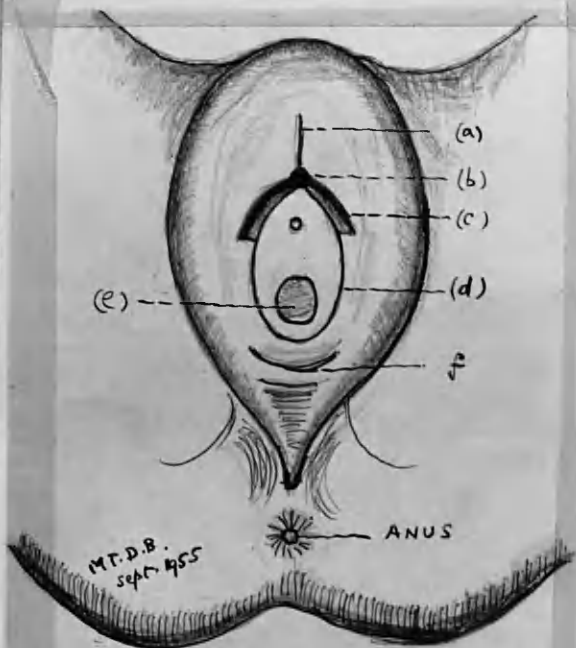


Diagram E.

Partial Circumcision.

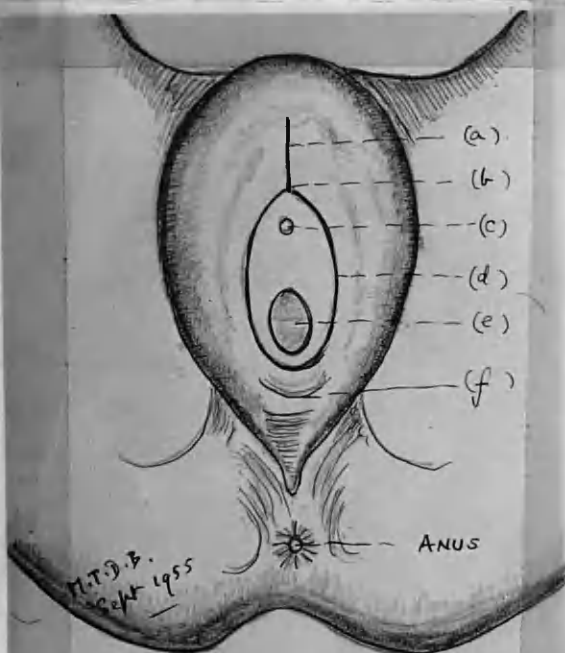


Diagram F.

Complete Circumcision.

linear scar representing the excised labium minus (lower 2/3). (e) - is the Vaginal orifice. (f) - the fourchette. This also is a variety of "Partial Circumcision".

Diagram F: Shows the appearance of the genitalia in complete circumcision (a) - linear scar of excised clitoris. (b) - the point where the glans was prior to excision. (c) - Ext. Urethral orifice. (d) - is the excised margin of the left labium minus. (e) - is the Vaginal orifice. (f) - represents the point of union of the labia majora.

There was no complication in this case. This is Complete circumcision.

Diagram G: Shows the external Genitalia of a completely circumcised woman. (a) - represents the excised clitoris which is replaced by scar tissue. Note the contraction of the width of the vestibule by scar tissue stretching from the excised margin of one labium minus to the other. (c) - leaving an opening opposite the ext. urethral orifice, (b). (g) - is the upper margin of the vaginal introitus situated behind the scar which nearly covers the introitus. (e) - is the narrowed fossa navicularis. The patient's complaint was difficult micturition and

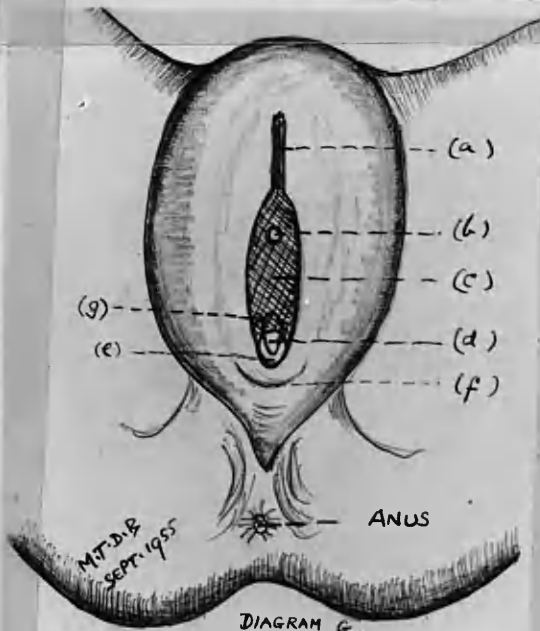


DIAGRAM G.
COMPLETE CIRCUMCISION
WITH SCAR FORMATION AND
NARROWING OF VESTIBULE,
EXT. URETHRAL ORIFICE &
VAGINAL OUTLET.

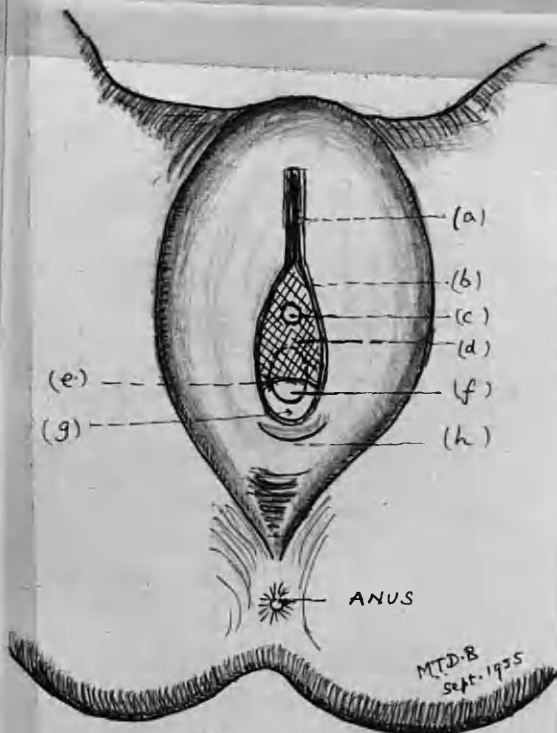


Diagram G₁
Complications of female
circumcision

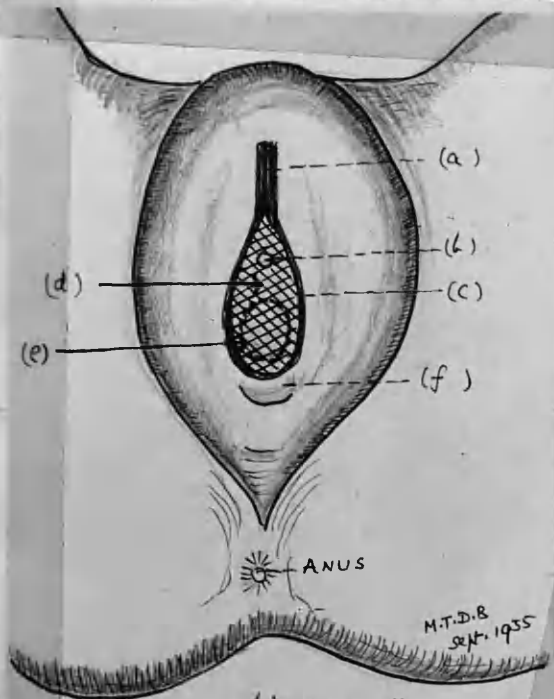


Diagram H
Complications of female
circumcision

dyspareunia.

Diagram G: is as for G; the scar tissue stretching across the vestibule has not narrowed the vestibule as in G. The effects on urination and coitus are as in G.

Diagram H: Represents a case in which the scar tissue has covered the whole vulva except the area of the ext. urethral orifice. Her complaints were dysuria and amenorrhea, with monthly lower abdominal pain and swelling.

The complication in this case was Haematocolpos - see text. (a) - scar tissue replacing excised clitoris. (b) - ext. urethral orifice. (c) - excised margin of left labium minus. (d) - scar tissue over vestibule and vaginal orifice. (e) - Vaginal orifice behind scar (seen at operation).

Diagram I: Shows (a) - excised clitoris. (b) - original site of glans. (c) - Ext. Urethral orifice behind. (f) - Scar tissue forming a shelf between the excised margins of the labia minora. (d) - it forms a dense scar tissue around the vaginal orifice. (e) - but not occluding it. (g) - is the area where the labia majora meet. The patient's complaint was difficult micturition.

Diagram J: /

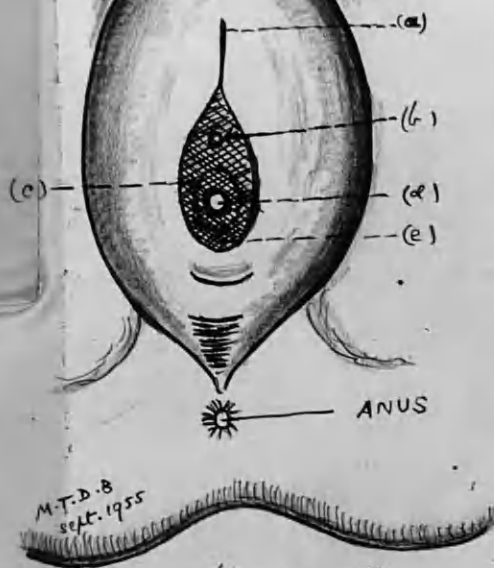


Diagram F
Complications of female
Circumcision

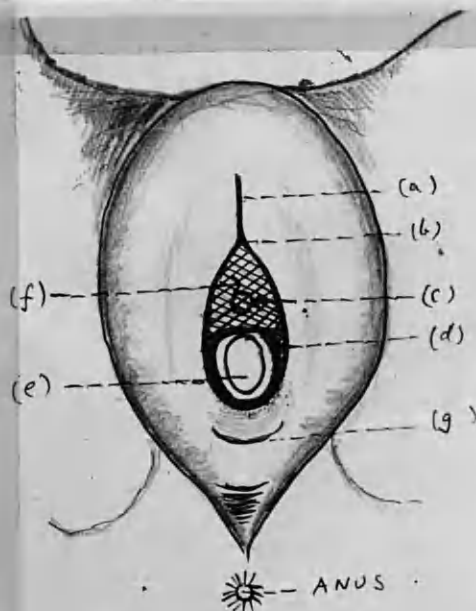


Diagram I
Complications of female
Circumcision

Diagram J: (a) represents the excised clitoris. Note that the scar tissue from the excised margins of the labia minora has stretched across the vulva, leaving small openings opposite (b) the urethral orifice, and (d) the vaginal orifice. (c) - shows the margin of the vaginal orifice behind the scar tissue. The fossa navicularis is also covered over by scar. The patient's complaints were difficult micturition and inability to cohabit with her husband.

CHAPTER NINE

Complications of, or problems associated with female circumcision.

Worsley (1938) gives the following complications:- Haemorrhage which is "always profuse", sepsis and cellulitis, keloids of the scar in about 50% of his cases in the Sudan; the mouth of the urethral may be sliced off too, and the urethra may become incorporated in the scar tissue formation of the vulva. Sequeira (1931) mentions in addition that urinary calculi may be found in septic pockets behind the scars resulting from circumcision; dyspareunia, retention of urine, and dystocia during parturition have also been mentioned. Laycock working in Somaliland (1950) mentions haemato-colpos as a complication of Infibulation, and sepsis and

prolapse of the uterus as complications of Defibulation. He excised a cyst embedded in the scar tissue between the fused labia minora. He also described a case of pseudo-elephantiasis of the vulva resulting from sepsis and lymphatic obstruction from cicatrisation of the excised areas.

It appears to me that most of these complications mentioned by these authors are due not only to the excision of the clitoris and labia minora per se, but also to the combined operations of Infibulation and Defibulation, neither of which is practised in Nigeria.

Their accounts lack statistical analysis - for example, none of the authors gave figures as to the relative incidence of the various complications in any tribe, with the exception of Worsley who indicated the incidence of Keloids in the Sudan.

In my account I have given the relative incidence of each complication, and also reasons for the observed facts.

The various complications associated with female circumcision in Nigeria are discussed under the following headings :-

(A) Immediate post-operative complications.

(B). Remote gynaecological complications unassociated with labour.

(C). Obstetrical Complications which are due to complete Circumcision.

(D). Remote gynaecological conditions due to labour whose course has been modified by circumcision.

(E). Social problems associated with circumcision.

(F). Other complications and problems.

(A) Immediate post-operative complications:

1. Primary Haemorrhage and Shock: It will be recalled that the internal pudendal artery in the female supplies the labia pudendi through its labial branches; the deep artery of the clitoris supplies the corpus cavernosum clitoridis, and the dorsal artery of the clitoris is distributed to the dorsum of the organ, and ends in the glans and prepuce.

In female circumcision, excision of the labia minora and the clitoris has been known to give rise to quite uncontrollable haemorrhage from these blood-vessels, which, combined with the pain of the operation, especially in the adolescent or adult, has produced much shock. In Obubra area, in Eastern Nigeria, three cases were treated for such complications by the investigator. The inci-

dence of shock and haemorrhage is greatest in those women who are circumcised just before marriage.

Most illiterate Nigerian women would hesitate to bring their daughters who are bleeding and shocked from circumcision, to hospital for treatment because of an unfounded fear that they may be handed to the Police. So that one does not see very many of these cases in hospital; but no less than 28% of those who were questioned by me, and who had been circumcised after the age of ten years, in particular those who were circumcised just before marriage gave a history of bleeding from the excised areas which lasted three to four days, and were too sick to move about or to eat.

2. Secondary Haemorrhage from sepsis: It is remarkable how many of these operations done under septic conditions tend to heal almost per primam. However, there were several instances of circumcised females who had to be treated by me for secondary haemorrhage due to sepsis. An instance was that of a woman aged 23 years, who, prior to circumcision had been my patient for a gynaecological condition. Incidentally, she offered an excellent opportunity for studying the effect of circumcision on the external genitalia as I had examined her

before and after circumcision. The haemorrhage following her circumcision could not be controlled by the native "barber". He had applied various juices of different plants, powdered leaves, and so forth. The sepsis which followed not only delayed healing but produced secondary haemorrhage eight days after the initial operation. She was brought to hospital exsanguinated, and septic. The husband who was an "educated" native Court Clerk was of the opinion still that circumcision was a good custom!

Forty out of two hundred of those questioned informed me that they bled from the excised area from the sixth to the tenth day after operation. The bleeding was controlled by the "barber" of the village; the incidence is about 20%. Sepsis without secondary haemorrhage, but delaying healing of wound occurred in no less than 25%. This is a remarkably low incidence considering the rather septic and primitive conditions under which the operations are performed.

3. Tetanus: Two girls who had been circumcised were brought to hospital within fifteen days of their operation, with all the signs and symptoms of infection by *Clostridium tetani*. The circumcision wounds had gone

septic and had not healed properly on the 15th day after operation. As there were no other wounds seen on the body, it was concluded on clinical grounds that the Cl. tetani must have found its way into the body through the excised area. The incubation period of Cl. tetani it will be remembered is 4 to 21 days or over. Average is 12 days.

One of the girls who suffered from this complication was brought to hospital when the symptoms were fully established. She died. The other girl came a bit earlier. She recovered after several days in hospital.

Opportunity was taken on these two occasions to give a talk to the hospital staff, and later during one of the local Health Week Organisations, on the evils of female circumcision.

One cannot give accurate figures of the incidence of Tetanus following female circumcision.

4. Dysuria: Practically all circumcised women complain of painful micturition for three or four days after the operation. It is due no doubt to the inflammatory oedema around the external urethral orifice. It disappears when healing takes place.

(B) Remote Complications:

In the completely circumcised, i.e. where the clitoris and labia minora are excised, various degrees of cicatricial contraction of the excised area may occur. It is remarkable how much immunity the female external genitalia enjoy, considering the bacterial flora of the part and of the neighbouring anal areas. Many cases heal by first intention, leaving only a linear scar. In a number of cases, however, sepsis supervenes, and healing occurs by granulation tissue, which is subsequently converted into fibrous tissue. Contraction of fibrous tissue later follows which may reduce the original surface by as much as 75% (Illingworth and Dick). This cicatricial contraction of operated area leads to a narrowing of the vestibule and vaginal introitus. See statistics for % incidence.

2. Formation of a fibrous membrane of variable extent

(a) A thin membrane of fibrous connective tissue is quite often found to bridge the margins of the excised surfaces especially where both labia minora have been removed. This fibrous membrane may extend from the excised clitoral area and labia minora to the upper margin of the external urethral orifice. In these

cases an opening may or may not be seen in the membrane opposite the Ext. urethral orifice. If no such opening takes place urine spatters over the thighs when the subject urinates. This condition was seen mostly in children who were brought to hospital for repair operation.

There were twenty cases seen in children between the ages of 1 and 3 years - one being the daughter of a School teacher: these native customs die hard: These fibrous membranes lend themselves readily to excision; to prevent further contraction dressing with Tulle gras or vaseline gauze was employed after excision of the membrane.

(C). There were cases in which the fibrous membrane stretched down to cover part or all of the vaginal introitus. Nature is kind in allowing urine to break through this membrane in its process of formation, so leaving an opening within the membrane - usually opposite the external urethral orifice to permit of micturition.

If the fibrous membrane covers part of the vaginal introitus, difficulty in sexual congress due to a small vaginal introitus is usually complained of. Where the fibrous membrane occludes the vaginal introitus,

Haematocolpos is the result. There were three cases of this latter complication seen requiring a cruciate incision of the membrane, and letting out any retained blood and secretion, and trimming the edges of the membrane. The first complication i.e. difficulty in sexual congress is quite a common complaint in completely circumcised women. It was this complication which first drew my attention to the subject of circumcision in females: The woman in question had been circumcised, according to the prevailing custom in her District, eight days after birth. She married at about 16 years of age in the Roman Catholic Church where monogamy is the law. Their marriage could not be consummated as the woman had been "badly" circumcised; the scar tissue of the circumcised area had encroached on the vaginal introitus, narrowing it down to about $\frac{1}{2}$ inch in diameter. She and her husband had tried all sorts of remedies in order to effect penetration by the male partner without success, until in exasperation they consulted a doctor. The first "repair" operation did not widen the introitus sufficiently for male penetration. After two years of hardship at coitus, the husband was constrained to take another wife "according to native law and custom". The Roman

Catholic Church frowned on this, and so the husband was ex-communicated. The frustrated first wife left her husband and sought further treatment. She consulted me in Kafanchan in 1951. Fenton's operation to widen the introitus was performed. She is now happily married to another man with whom she has a child. A history of difficulty in sexual congress was noted in 8% of all the cases ^{of} completely circumcised women. In some, dilatation of the vaginal introitus with Hegar's dilators was resorted to; in the more serious cases, Perineotomy and repair by Fenton's operation was performed with satisfactory results.

In the milder degree of contraction commonsense advice such as the application of lubricants such as vaseline, was sufficient. In some, although penetration took place, after lubrication, the tumescence following excitation produced much pain on the male organ and difficulty in withdrawal.

Serious cicatrical contraction causing dyspareunia and difficulty in urination formed 13.3% of my cases.

(C) Obsteric and gynaecological Complications associated with Circumcision.

1. Delay due to faults in the passage; delay in the second

stage of labour: Rigidity at the vaginal outlet: Faults in the soft passages at labour may be due to a variety of causes. Among the well-known ones may be mentioned the following:-

- (1) Those which occur at the perineum and vaginal outlet.
- (2) Those that are due to obstruction in the vagina.
- (3) Faults occurring at the cervix uteri.
- (4) Those which arise as the result of maldevelopment of either the uterus or the vagina.
- (5) Those due to an altered utero - vaginal axis, e.g. in pendulous abdomen or that resulting from a ventral fixation operation for retro-displacement.

The delay due to a faulty passage arising from the effects of circumcision occurs at a low level - the perineum and vaginal outlet, the other parts of the birth canal being normal. It was observed in the course of the investigation that in about one-third of all completely circumcised females of child bearing age, a firm, sometimes dense scar tissue occupied the area of the excised clitoris and because healing had occurred by granulation tissue, the scar tissue extended down the margins of the vestibule and vaginal introitus to form a cicatricial ring. The ring does not stretch in the same

way as would normal tissue, and even where the uterine contractions are good, and the pelvic outlet is wide (about 4" to 4½"), delay in the birth of the child has occurred. This was the case in no less than 50 primigravidae in labour for whom I had been called at night. In 20 of these 50 cases the opening of the vaginal outlet did not exceed 1 inch when the subjects in labour bore down to their maximum. The pelvis was roomy, but the foetal head could not descend past the cicatricial ring. The shining smooth scar tissue forming a barrier at the outlet could not be mistaken for such conditions as rigidity of the perineum due to overdeveloped Levatores ani muscles or the other muscles of the pelvic floor, or to a cyst or other growths of the vaginal wall obstructing labour.

The delay in the perineum has been known to cause (a) Uterine inertia (b) Asphyxia neonatorum, (c) bad perineal, vulvar or vaginal tears where the uterine contractions are powerful, (d) still-birth. To summarise, circumcision scars may extend from the clitoris to the vaginal outlet as far down as the posterior extensions of the labia minora into the posterior commissure, thus narrowing down the vulva, and forming a cicatricial, non-



"HOSPITAL" BABY - First prize -

Health week held at Obubra; Nigeria 1952. The mother, who was completely circumcised was rushed into Hospital as the baby's head, although lying low in the vagina could not be expelled by the mother on account of scar tissue of the vulva produced by circumcision. The foetal position was L.O.A. After bilateral episiotomy the child was born spontaneously. The picture was taken when the baby was about a year old.

distensible ring which may obstruct or delay labour in the second stage, and also give rise to uterine inertia, asphyxia meonatorum and tears of various degrees, and also still-birth.

A timely episiotomy, unilateral or bilateral, combined, if need be, with a low forceps, with adequate support of the perineum by an assistant can, in most cases avert catastrophies.

Perineal Lacerations:

The effects of circumcision in producing tears of the perineum were carefully observed in delivery rooms; tables give the relative incidence of tears classified under the following headings :-

- (a) No Tears: Under which may be included stretching or moderate tears of the fourchette which are nearly always seen in primiparae; these require no stitching.
- (b) Second Degree Tears: in which the perineal body is involved, or in more severe cases, the perineal tear extends in one or more directions in the posterior vaginal wall.
- (c) Third Degree Tears: which involve the sphincters of the anus and extend to the anterior rectal wall, with stretching of the Levatores ani.

Summarising the findings one may say (a) that comparing completely circumcised with uncircumcised persons, the incidence of second and third degree tears is greater in the former groups irrespective of where delivery took place (Home or Institution).

(b) Comparing the incidence of second and third degree tears in the completely circumcised with the partially circumcised groups, it was found that these tears occurred more frequently in the former group, irrespective of whether delivery took place in the home or in an institution.

(c) In comparing the incidence of tears in the two groups- Partially circumcised and un-circumcised, it was again found that the partially circumcised had more frequent tears than the uncircumcised irrespective of the place of delivery.

(d) In all three groups, more tears occurred in Home deliveries than in Maternities.

What then are the factors responsible for the higher incidence of tears in the circumcised groups: I am inclined to the view that the answer is to be sought in the properties of scar tissue which is found in the tissues of the external genitalia which are excised at

circumcision. Scar tissue resulting from the deposition of collagenous material is inelastic. In normal labour, the presenting part gradually stretches and dilates the parts of the birth canal through which it has to pass. In the uncircumcised the parts around the vaginal outlet are elastic and distensible. If such factors as a large head, malposition such as a persistent occipito-posterior position, face and brow presentations, or rapid delivery of the head before the perineum is properly stretched, etcetera, are excluded, with proper support of the perineum, tears may not occur, or can be reduced to a minimum. In the completely circumcised, the resulting scar tissue contracts and is inelastic and non-distensible. If the uterine forces are good, a tear results very much more easily than in the uncircumcised. These tears may extend upwards to the area of the excised clitoris, or down into the perineum.

Profluvium Seminis: Nearly 10% of the circumcised women with perineal tears complained of inability to retain the seminal fluid after coitus as against 2% in the uncircumcised, after labour.

Genital Prolapse

The higher incidence of second and third degree tears

of the perineum, and injuring the perineal body and Levator muscles and the delay of the foetal head at the outlet causing pressure on the anterior vaginal wall and injuring the pubo-cervical fascia by stretching, predispose to a higher incidence of all varieties of genital prolapse in the completely circumcised than in the partially circumcised, or uncircumcised.

It may be mentioned here, that in the circumcised, genital prolapse occurred at a much earlier age than in the uncircumcised group. In the former (uncircumcised) group, prolapse of the anterior vaginal wall, vault prolapse, rectocele etc. occurred as from 25 years upwards. In the uncircumcised, prolapse occurred as from 45 years when the atrophic changes characteristic of the menopause were beginning to set in. Two cases were operated upon for genital prolapse where the patients were below the age of 30 years, but who were nulliparous. These are examples of congenital prolapse—"probably the result of certain developmental deficiencies in either the bony pelvis or the pelvic organs (Novak).

There were in this series thrice as many cases of Genital Prolapse in circumcised women as in the un-

circumcised. More information on this can be obtained from a study of the statistical analysis of "Perineal tears and female circumcision in Chapter 10.

Puerperal morbidity and sepsis: The high incidence of perineal and vulvar lacerations in the circumcised leads to a high morbidity rate, and puerperal sepsis, as the lacerated maternal tissues form a suitable nidus for any invading micro-organism.

The following figures are given to show the relative incidence of the various complications associated with female circumcision :-

TABLE A: Immediate post-operative complications P.75.

TABLE B: Remote Gynaecological complications P.76:
P.77:

TABLE C: Obstetrical complications P.77.

TABLE A: See P. 75.

TABLE A

Statistical Analysis of Complications
following Female Circumcision

Immediate Post-operative Complications

Complication	Number questioned	Number affected	Number un-affected	% Incidence.
(a) Haemorrhage lasting 2-3 days	300	120	180	40%
(b) Severe pain and shock	100	28	72	28% Greater in adults
(c) Sepsis & delay in wound healing	120	30	90	25%
(d) Secondary haemorrhage	200	40	160	20%
(e) Dysuria	300	300	-	100%
(f) Tetanus	Only two cases were seen by me. See Text.			

TABLE B: see P.76.

TABLE B

Remote Gynaecological Complications

See separate analysis for perineal lacerations which later give rise to Genital Prolapse. (Chapter 10).

Scar formation - various degrees of; Number of circumcised women examined - 300.

Condition	No affected	% Incidence
1. Cicatricial contraction of vulva of variable extent.	125	41.66%
2. Moderate cicatricial contraction of vulva - urethra and vagina not involved.	46	15. 3%
3. Scar tissue forms a partial shelf over vestibule, covering ext.urethral orifice and giving rise to difficult micturition.	20 children 16 adults.	12%
4. Scar tissue extends to part of vaginal introitus causing dyspareunia	40	13. 3%
5. Scar tissue occludes vaginal orifice, but not ext.urethral orifice: result-Haematocolpos.	3	1%

TABLE B (continued)

Condition	No. Affected	% Incidence
6. Profluvium Seminis	Uncircumcised: 2% Circumcised: 10%	
7. Genital Prolapse	See Chap.10	

TABLE C

Statistical Analysis of Obstetrical Complications of
Female Circumcision

No. examined - 200 Cases.

Note that in one patient there may be more than one complication e.g. Delay in second stage of labour, foetal asphyxia and puerperal morbidity all combined.

- (1) Delay in second stage of labour: 20 - 25%.
- (2) Perineal Tears (see separate analysis).
- (3) Foetal Asphyxia (5 - 8% of home deliveries by untrained natives).
- (4) Uterine Inertia: Cases brought as emergencies to hospitals: 15% of primiparae.
- (5) P.P.H. resulting from anterior and posterior tears: 20%.
- (6) Puerperal morbidity resulting from delayed labour, infection of tears: 20%.
- (7) Puerperal sepsis in Home deliveries by untrained natives - surprisingly lower than one would expect - 10%

CHAPTER TEN

PERINEAL LACERATIONS AND FEMALE CIRCUMCISION

STATISTICAL ANALYSIS

I have given much space to this aspect of the study because it appeared to me that in a large number of circumcised women, some degree of severe tear of the perineum was the rule rather than the exception, especially in those who delivered in their homes without skilled attention.

I have analysed the incidence of perineal lacerations on a tribal basis, comparing the circumcised with the uncircumcised, the partially circumcised with the completely circumcised.

As these perineal tears constitute a great factor in the production of genital prolapse, especially where the tears involve the perineal body, and the levator ani muscles (in particular third degree tears) the relation of perineal tears to female circumcision is an important subject.

EFIKS (Calabar Province.)

No. examined: 350 females.

Age group: 16 years to 60
and upwards.

TABLE - see P. 79.

No uncircumcised = 50 (14.28%)						No completely uncircum- cised = 200 (57.14%)					
Home = 42			Institution = 8			Home = 180			Institution = 20		
1	2	3	1	2	3	1	2	3	1	2	3
39	3	-	8	-	-	55	97	28	15	5	-
92.9%	7.1%	-	100%	-	-	30.5%	53.9%	15.6%	75%	25%	-

1 = No Tear

2 = 2° Tear

3 = 3° Tear

No. partially circumcised = 100 (28.57%)

Home = 82			Institution = 18		
No Tear	2° Tear	3° Tear	No Tear	2° Tear	3° Tear
72	10	-	18	-	-
87.7%	12.2%	-	100%	-	-

Interpretation of analysis and inference:

In this series, 350 parous Efik women between the ages of 16 years to 60 and upwards were examined. 50, i.e. 14.28% were uncircumcised, 200, i.e. 57.14% were completely circumcised, and 100 i.e., 28.57% were partially circumcised.

Of the 50 uncircumcised, 42 (84%) delivered in their homes, and 8 (16%) delivered in institutions. Of the 42 home deliveries 92.9% had no tear, 7.1% had second degree tears. There was no tear whatsoever

in those who delivered in institutions.

Of the 200 completely circumcised, 180, i.e., 90% delivered in their homes and 20, i.e., 10% delivered in institutions. 30.3% of those who delivered in their homes had no tear, 53.9% had second degree tears, and 15.6% had third degree tears.

Of the 20 who delivered in hospitals, 75% had no tears, due to proper support of the perineum, a timely episiotomy or low forceps as the case may be. 25% had second degree tears.

Of the 100 cases of Partially circumcised, 82, i.e. 82% delivered in various institutions. Of the Home deliveries, 87.8% had no tear and 12.2% had second degree tears. Of the Hospital deliveries, there were not tears whatsoever.

Conclusion: (1) In this series, it was found that far more women delivered in their own homes where skilled care was not available than those who delivered in Institutions. (2) Tears of all types are greater among the completely circumcised, intermediate in the partially circumcised, and lowest in the uncircumcised. (3) Tears are greater in Home deliveries than in Institutional deliveries irrespective of circumcision or no circumcision. (4) Among the Efiks, more people are

completely circumcised than are either partially circumcised or uncircumcised. The figures are, complete circumcision: 57.14% Partial: 28.57%, Uncircumcised: 14.28%.

Statistical Analysis (cont.)

Tribe:

IBOS

No. examined =

518

Completely circumcised= 386						Uncircumcised= 40					
Home Deliveries = 258			Hospital = 128			Home Deliveries = 28			Hospital = 12		
1	2	3	1	2	3	1	2	3	1	2	3
45	140	64	106	16	6	26	2	-	12	-	-
21.7%	54.2%	24.1%	82.8%	12.5%	4.7%	92.8%		7.2%		100%	

1 Signifies no Tear 2 = 2^o Tear 3 = 3^o Tear

No. partially circumcised = 92.

No. partially circumcised = 92.

Home = 74			Institution = 18		
No Tear	2 ^o Tear	3 ^o Tear	No Tear	2 ^o Tear	3 ^o Tear
68	6	-	18	-	-
91.8%	8.2%	-	100%	-	-

Interpretation of analysis and inference:

There were 518 Ibos examined (parous) between the ages of 16 and 60 and upwards. Of these 386 (74.5%)

were completely circumcised, 40 (7.7%) were uncircumcised and 92 (17.8%) were partially circumcised.

Of the 386 completely circumcised females, 258 delivered ~~ed~~ at home and 128 delivered in institutions.

Home deliveries: 54 (21.7%) had no tear. 140 (54.2%) had second degree tears, and 64 (24.1%) had third degree tears, with or without cystocele, rectocele or procidentia.

Institutional deliveries: 106 (82.8%) had no tear. 16 (12.5%) had second degree tears, and 6 (4.7%) had third degree tears, with or without cystocele, rectocele or procidentia.

Of the 40 Uncircumcised females, 28 delivered at home and 12 in institutions.

Home deliveries: 26 (92.8%) had no tear, 2 (7.2%) had second degree tears; there was no third degree tear.

Hospital delivery: 12 persons i.e., 100% delivered without any tear. Of the 92 partially circumcised, 74 delivered at home, 18 delivered in various institutions.

Institutional deliveries: 17, i.e. 100% delivered without any tear.

Inference:

(1) Nearly three-fourths (74.5%) of the Ibos examined had

circumcised completely. Only 7.7% were uncircumcised, and 17.8% were partially circumcised.

(2) In each series, more women delivered in their homes where skilled attention was not available, than in the Maternities.

(3) In comparing Home and Institutional deliveries, the following conclusion can be made :- The percentage of tears is less in hospital deliveries, where skilled attention prevented any catastrophe.

(4) That the incidence of 'No Tear' is higher among the uncircumcised than in the completely circumcised group. The 'No Tear' incidence was higher in Institutional than in Home deliveries. In comparing the figures for the completely circumcised and partially circumcised groups, it was found (a) that the 'No Tear' incidence is higher in the partially circumcised than in the completely circumcised, i.e., 91.8% compared with 21.7% (b) There were more second degree tears in the completely circumcised (54.2%) than in the partially circumcised (8.2%) (c) There was no third degree tear in the partially circumcised group (cf. 24.1%) in the completely circumcised. (d) Of those who delivered in Institutions, the partially circumcised had no tear whatsoever.

It was observed in the course of the observation that nearly 98% of the uncircumcised women among the Ibos were from Onitsha town, the remaining 2% being spread indifferently amongst other Ibos. Furthermore, 99.5% of all real Onitsha Ibos were found to be uncircumcised. It was my impression that the 0.5% who styled themselves "Onitsha Ibos" (Onitsha Ibos are regarded as socially superior to other Ibos - and many Onitsha persons do not regard themselves as Ibos, stating that they originated from a part of Benin, West of the River Niger, a view which is substantiated by Basden in his "Niger Ibos") were probably non-Onitsha Ibos whose parents had come to settle in Onitsha temporarily or permanently but who still retain the custom - in this instance - female circumcision - of their original home.

Statistical Analysis (cont.)

OGOJA: No. examined = 92.

No. uncircumcised = 32 No. completely circumcised =
28.

TABLE - See P. 85.

Home Delivery= 32			Hosp. Delivery= 0			Home Delivery= 28			Hos. Del.= 0		
No Tear	2°	3°	No Tear	2°	3°	No Tear	2°	3°	No Tear	2°	3°
32	-	-	-	-	-	4	12	12	-	-	-
100%	-	-	-	-	-	14.2%	42.9%	42.9%	-	-	-

2° = Second degree Tear

3° = Third Degree Tear

No. partially circumcised = 32

Home delivery = 32 Hospital delivery: NIL.

No Tear	2° Tear	3° Tear
28	4	-
87.5%	12.5%	-

Interpretation of Analysis and Inference:

There were 92 persons examined in Ogoja. 34.8% were uncircumcised, 34.8% were partially circumcised, and 30.4% were completely circumcised. There were no deliveries in any institution the natives preferring to deliver in their own homes.

Of the 32 uncircumcised females who delivered in their homes with no skilled attention, no tear resulted.

Of the 32 partially circumcised females who delivered at home, 28 (87.5%) had no tear, whilst 12.5% had second degree tears.

Of the 28 who were completely circumcised and who delivered at home, 14.2% had second degree tears, and

42.9% had third degree tears with or without cystocele, rectocele or procidentia.

Inference: The incidence of 2° and 3° tear is highest in completely circumcised, intermediate in the partially circumcised, and least in the uncircumcised group.

The females examined were natives of the following places :- Ban-sara, Obudu, Moube, Otukwang, Ishibori, and Ogoja itself, all being villages in Ogoja and Obudu Districts. The histories were taken, and the examinations carried out in 1954 during the investigator's tour of four months in Ogoja Hospital and Division.

Agoi, Bahumunu and Yakurr Clans:

of Obubra Division, Cross River:

No. examined = 98

No. uncircumcised = 96 Home = 96			No. circumcised = 2 Home = 2		
No Tear	2° Tear	3° Tear	No Tear	2°	3°
94	2	-	1	1	-
97.9%	2.1%	-	50%	50%	-

The Agoi, Bahumunu and Yakurr clans are small tribal groups in Obubra Division. The natives live along the territory bordering the eastern shores of the

Cross River, between the Divisional Headquarters, Obubra, and Ediba a town of some commercial importance. The largest Yakurr village is Ugep, and the largest Bahumunu village is Ediba. The Agoi clan is sandwiched between the Mbembe and Yakurr clans.

Out of a total of 98 females examined, 96, i.e., 97.9% were uncircumcised and 2, i.e. 2.1% were circumcised. The two circumcised came from Agoi Clan. They were partially circumcised - the two labia minora were excised. The clitoris was intact in each case.

All the 98 persons delivered at home. Of the 96 uncircumcised parous females 94, i.e., 97.9% had no tear whatsoever and 2, i.e., 2.1% had 2⁰ tears.

Of the two partially circumcised, 50% had no tear and 50% had second degree tears.

Inference:

(a) It may be generalised that the Yakurrs and Bahumunus do not circumcise, and that the Agois do circumcise. (Vide Table on page 86.)

(b) The natives of these clans prefer to deliver in their own homes.

(c) That the incidence of No Tear is highest in the

uncircumcised groups.

MEMBRE CLAN (OBUBRA DIVISION)

CROSS RIVER:

No. examined = 128

No. uncircumcised = 128			No. circumcised = NIL
No Tear	2 ^o Tear	3 ^o Tear	Hospital delivery: NIL
126	2	-	
98.4%	1.6%	-	

Interpretation of Analysis and Inference:

All the persons examined in the Mbembe clan were uncircumcised. In all 128 women between the ages of 16 to 60 years and over were examined; the degree of parity varied from one to nine.

The cases were all examined in the General Hospital, Obubra (Government) from 1952 to 1953 when the investigator was Medical Officer in that Hospital. All the cases delivered in their own homes. Antenatal service is hardly made use of by the natives of Obubra.

Despite this, only 2 out of 128 women had second degree tear, i.e., 1.6% of the total number examined. This is a low figure compared with the incidence of tears among tribes who circumcise their females.

For comparison, the figures for other clans where female circumcision is not practised are set forth in tabular form :-

Tribe: IJAW: Clans: Kalabari, Bonny, Brass, Opobo and Ogu.

No. examined = 370

No. uncircumcised = 370.

Home deliveries = 360			Hospital deliveries = 10		
No Tear	2° Tear	3° Tear	No Tear	2° Tear	3° Tear
330	15	15	10	-	-
91.6%	4.2%	4.2%	100%	-	-

No. circumcised: NIL

Interpretation of analysis:

There were in all 370 cases examined, of whom 360 delivered in their homes without skilled assistance (97.3%) and 10, i.e., 2.7%. All the 370 cases were uncircumcised.

Home deliveries: 330 (91.6%) had no tear, 15 (4.2%) had 2° tears, 15 (4.2%) had 3° tear.

Hospital deliveries: 10. There was no tear.

Inference:

(a) The women of Kalabari, Bonny, Brass, Ogu and Opobo do not circumcise.

(b) There is therefore a high incidence of 'No Tear' in

(c) There were no second or third degree tears in the hospital cases with skilled assistance as compared with the 4.2% each of 2° and 3° tears in those who delivered at home.

No. examined = 320.

<u>No Uncircumcised = 300 (93.75%)</u>	<u>No. Circumcised = 20 (6.25%)</u>
--	-------------------------------------

Home del.=300			Hospital = 0	Home del. = 15		
No Tear	2 ^o Tear	3 ^o Tear		No Tear	2 ^o Tear	3 ^o Tear
270	20	10 -		4	10	1
90%	6.7%	3.3% -		26.66%	66.66%	6.66%

Hospital del.= 5

No Tear	2 ^o Tear	3 ^o Tear
4	1	-
80%	20%	-

90.

rigorously had no association with female circumcision as it is the case say in the Ekoi tribe of the Cross River. It was (fattening Room ceremony) purely a period set aside in every girl's life, in the old days in Okrika, to mark the period of transition from puberty into budding womanhood. They somehow realise that the period of the menarche is one of great tension when there is a free interplay of the hormones controlling sexual responsiveness, growth etc. Perhaps these natives are justified in temporarily isolating the young girl at this period.

The incidence of circumcision in this series was 6.25%. This low figure is accounted for in two ways (a) The Okirkans intermarry freely with the Ibo tribes who circumcise their girls. Most Ibo girls are "married" at an early age (eight years upwards i.e. Child marriage) and are reared in the family of their prospective husbands. At the time they are "married" most of them are already circumcised. But having grown up in the new environment for fifteen to twenty years, they can hardly be distinguished from the true Okirkans in dialect, mode of dress and general behaviour, except by such tell-tale indelible marks as the scars of circumcision or tribal marks. (b) The ignominious slave trade of fifty to sixty

years ago brought slaves down to the coast from the hinterland; some of its landmarks are still unerased, reminding us of those evil days. The female children who were taken captives from their mothers to various parts of the coast have grown into full womanhood and old age, with the indelible marks of circumcision on them. (Vide Chapter on the medico-legal significance of female circumcision).

It is the women in these two groups who, having no recollection of their own native land, take on the tribal badge of their present abode. They are in fact not the true natives of the land. This is to be found not only in Okrika, but also in such places as Opobo, Bonny, Kalabari etc.

Interpretation of Analysis: 100% of the uncircumcised persons delivered in their own homes without skilled assistance, 90% of these had no tear. 6.7% had second degree tear and 3.3% had 3^o tear. Of the circumcised 26.66% delivering in their homes had no tear (most were partially circumcised) 66.66% had 2^o tear and 6.66% third degree tears. Of the 5 who delivered in Institutions, 80% had no tear and 20% had 2^o tears.

CONCLUSION

- (a) Most Okirkans (perhaps all true Okirkans) do not circumcise. (Vide Supra).
- (b) Tears are commoner in the circumcised than in the uncircumcised group.
- (c) The incidence of tears is higher in the Home, than in Institutional deliveries.

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STATISTICAL ANALYSIS (CONTINUED)

TRIBE EKOI

CROSS RIVER

The women examined were natives of Ikom, Akparabong, Etomi Bende, Ayuk, Ajesso, Nfum, Abijam and Ejagam. (Ikom Division).

No. Examined 180

No. Uncircumcised = 40

No Completely Circumcised
= 128

Home = 40			Hospital=Nil			Home= 128		
No Tr.	2° Tr.	3° Tr.	No Tr.	2° Tr.	3° Tr.	No Tr.	2° Tr.	3° Tr.
40	-	-	-	-	-	28	64	36
100%	-	-	-	-	-	21.8%	50%	28.2%

Hosp.= Nil

2° = Second degree tear.

3° = Third degree tear.

No/

No Tr.	2° Tr.	3° Tr.
-	-	-
-	-	-

No. Partially Circumcised = 12.

Home Delivery = 12

Hospital Delivery = Nil.

No Tear	2 ^o Tear	3 ^o Tear	No Tear	2 ^o Tr.	3 ^o Tr.
100%	-	-	-	-	-

INTERPRETATION OF ANALYSIS

There were 180 Women examined.

40 were uncircumcised = 22.2%

128 were completely circumcised = 71.1%

12 partially circumcised = 6.7%

Uncircumcised. They all delivered at home without skilled aid. There was no tear.

Completely circumcised. Formed 71.1% of all cases examined. They all delivered in their homes. 21.8% had no tear. 50% had 2^o tears and 28.2% had 3^o tears with or without genital prolapse.

Partially circumcised. Formed 6.7% of all cases examined. They all delivered at home, without a tear.

CONCLUSION

(a) More than half of the women examined (71.1%) in Ekoi tribe were completely circumcised, about one-fifth were uncircumcised and the remainder - about one-fourteenth

were partially circumcised.

(b) The incidence of tears is highest in the completely circumcised group, and did not occur in either the uncircumcised or partially circumcised group. Be it noted that in the Ekoi Tribe, the clitoris is often removed and a little of the labia minora in the partially circumcised group. There is thus no cicatricial ring around the outlet of the vagina.

(c) Until recently, all the women delivered in their own homes.

(d) The high incidence of 2^o and 3^o tears favours the production of genital prolapse which is fairly common in that area.

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OFUTOP AND OLULUMO CLANS

IKOM DIVISION CROSS RIVER

These two clans are to be found in Ikom Division. In all 124 completely circumcised and 44 partially circumcised and 4 uncircumcised females ranging from 16 years to 60 years and over were examined.

Home. Total Number Examined = 172 Home.

TABLE - See Page 96.

No completely Circumcised = 124			Partially Circumcised = 44.		
No Tear	2 ^o Tear	3 ^o Tear	No Tear	2 ^o Tr.	3 ^o Tr.
8	112	4	44	-	-
6.4%	90.4%	3.2%	100%	-	-

UNCIRCUMCISED = 4

Home Deliveries = 4

No Tear 2^o Tear 3^o Tear

4 - -

100 - - Hospital
Deliveries =
N I L

INTERPRETATION OF ANALYSIS

(a) Out of a total of 172 women examined -

124 were completely circumcised (72.09%)

44 were partially circumcised (25.28%)

4 were Uncircumcised (2.33%)

i.e. Nearly three quarters were completely circumcised, a quarter were partially circumcised and a very small minority were uncircumcised.

(b) All were home deliveries.

(c) The incidence of second degree tear in the completely circumcised group was 90.4%; in the partially circumcised group was nil, and in the uncircumcised group was nil. 3.2% of the completely circumcised had 3^o tears with or without genital prolapse.

More than 50% of the persons examined belong to the Church of Scotland Mission, others are either Catholics or pagans.

STATISTICAL ANALYSIS (CONTINUED)

TRIBE IBIBIOS

Several sub-tribes or clans are grouped under this Tribe. They are to be found in Calabar Province.

TOTAL NO. EXAMINED = 110

No. Completely Circumcised = 70 No. Partially Circumcised = 20.

Home Del.= 70 Maternity = Nil.				Home Maternity = Del.=20 0			
No tear	2 ^o Tear	3 ^o Tear	-	No Tr.	2 ^o Tr.	3 ^o Tr.	-
30	30	10	-	17	3	-	-
42.9%	42.9%	14.2%	-	85%	15%	-	-

NO. UNCIRCUMCISED = 20.

Home = 20

Maternity = Nil

No Tear	2 ^o Tear	3 ^o Tear	
18	2	-	-
90%	10%	-	-

INTERPRETATION OF ANALYSIS

(a) Out of 110 examined 70 i.e. 63.6% are completely circumcised 18.2% are partially circumcised.

(b) The incidence of "No tear" is highest in the Uncircumcised group (90%) intermediate in the partially

group, (85%) and lowest in the completely circumcised group (42.9%).

(c) All the women examined delivered in their homes where skilled attention was not available.

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OGONIS AND ELEME PEOPLE (200)

These are two clans in the Rivers Province in Eastern Nigeria sandwiched between the Okrikans and the Ibos, from whom they are quite different in customs, dialect and general physiognomy. There is a comprehensive report about these two clans in an Intelligence Report by Major Gibbons.

In all 200 women were examined. They were all uncircumcised. All had their first babies in their homes and the majority still prefer to deliver at home attended by "unqualified" native "midwives".

92% had no tear.

6% had 2^o tear.

2% had 3^o tear.

STATISTICAL ANALYSIS (CONTINUED)

A few non-Eastern Nigeria tribes were examined in the course of the investigation, for purposes of comparison. It may be stated here that the average pelvic

measurements, birth weight of first child, general physique and state of nutrition did not vary much in the cases investigated.

Tribes or Clans of Northern Nigeria examined were
Kaje, Kwoi and Kagoro.

These clans are to be found in part of the Plateau Province of Northern Nigeria. The investigations were carried out in the General Hospital, Kafanchan in 1951. The three clans mentioned live in and around Kafanchan where the Government Hospital is situated.

NO. EXAMINED = 110

No. Uncircumcised = 110 (100%) No Circumcised
= 0.

Home Deliveries = 100			Hosp. Deliveries = 10			N i l
No Tr.	2 ^o Tr.	3 ^o Tr.	No Tr.	2 ^o Tr.	3 ^o Tr.	
98	2	-	10	-	-	
98%	2%	-	100%	-	-	

INTERPRETATION OF ANALYSIS

- (a) Out of 110 women examined, 100% were uncircumcised.
- (b) 100 i.e. 90.9% delivered at home, and the remainder in Maternities.
- (c) The incidence of "No Tear" is very high in both home and maternity deliveries, being higher in the Maternity group of patients.

- TRIBE YORUBA (WESTERN NIGERIA)

The examinations were carried out in various Government Hospitals in Eastern Nigeria between the years 1951 and 1955.

TOTAL NO. EXAMINED = 162.

No. Uncircumcised = 144 (88.9%)

No. Circumcised =
18 (11.1%)

Home Delivery = 126			Hos. Del.= 18		Home Delivery = 18			
No. Tr. 2 ^o Tr. 3 ^o Tr.			No Tr. 2 ^o Tr.		3 ^o Tr. No Tr. 2 ^o Tr. 3 ^o Tr.			
114	12	-	18	-	-	9	9	-
90.5%	9.5%	-	100%	-	-	50%	50%	-

Hospital NIL
-
-
-

INTERPRETATION OF ANALYSIS

(a) Out of a total of 162 women examined 144 (88.9%) were uncircumcised and 11.1% were circumcised. Some of the latter were only partially circumcised.

(b) 126 i.e. 87.5% delivered in their homes and only 18 i.e. 12.5% delivered in Maternities.

(c) Of the 126 Home deliveries (uncircumcised group) 90.5% had no tear and 9.5% had 2^o tear.

(d) Of the 18 Hospital deliveries, there was no tear.

(e) Among the 18 circumcised, all delivered at home.
50% had no tear. 50% had second degree tears.

It will be observed that "No Tear" incidence is higher in the Uncircumcised group than in the Circumcised group and that far less tears resulted from Hospital deliveries.

The persons examined were drawn from the following places:-

(1) Ibadan	...	All Uncircumcised.
(2) Offa	...	Uncircumcised.
(3) Ado Ekiti	...	Uncircumcised.
(4) Ogbomosho	...	Uncircumcised.
(5) Ife	...	Uncircumcised.
(6) Abeokuta	...	Uncircumcised.
(7) Oyo	...	Uncircumcised.
(8) Owo	...	Uncircumcised.
(9) Ilesha	...	Four-fifths of number examined were uncircumcised.
(10) Ondo	...	Partially Circumcised.
(11) Ilorin	...	Completely Circumcised.

According to information received from a Yoruba woman female circumcision is practised in the following places in Yoruba land :-

- (1) Ogbomosho
- (2) Ife

- (3) -Oyo
- (4) Owu and Ijaya (parts of Abeokita)
- (5) Ibadan
- (6) Ilesha
- (7) Akure
- (8) Ondo
- (9) Offa
- (10) Oshogbo
- (11) Ede
- (12) Ilorin.

Although my investigation was carried out on only 162 persons, a glance at the summary of "persons examined were drawn from the following places" shows disagreement with the information given by the Yoruba woman (Vide supra). To my mind this is an example of the disparity which one often finds between information received and facts elicited from actual investigations. It is suggested that a special study of the distribution of female circumcision among the Yorubas should be conducted.

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General conclusion from the results of statistical analysis :-

(a) Altogether 2,538 women between 16 and 60 years and over were examined.

(b) The following clans do not circumcise their women:-
In the Rivers Province - Kalabari, Bonny, Brass, Ogu, Opobo, Ogoni and Elemes. In Ogoja Province, the Mbembes of Obubra Division.

The following clans practise female circumcision moderately - Agoi. Bahumunus and Yakurrs in Obubra division (97.9%). It was noted that of these three, the Agois circumcise, but in all probability, the Yakurrs and Bahumunus do not appear to circumcise their women.

The Okrikans, a clan in Ijaw Tribe in the Rivers Province showed an incidence of 93.75% of uncircumcised women. An explanation has been offered for the remaining 6.25% of circumcised people. The true Okrika free-born native does not circumcise.

It was also found that the true Onitsha born native woman is never circumcised, and an explanation has been offered.

(c) All other clans in Eastern Nigeria, as far as the investigation goes, circumcise their women. The Ibos show the highest incidence (74.5%) of "fully circumcised" women.

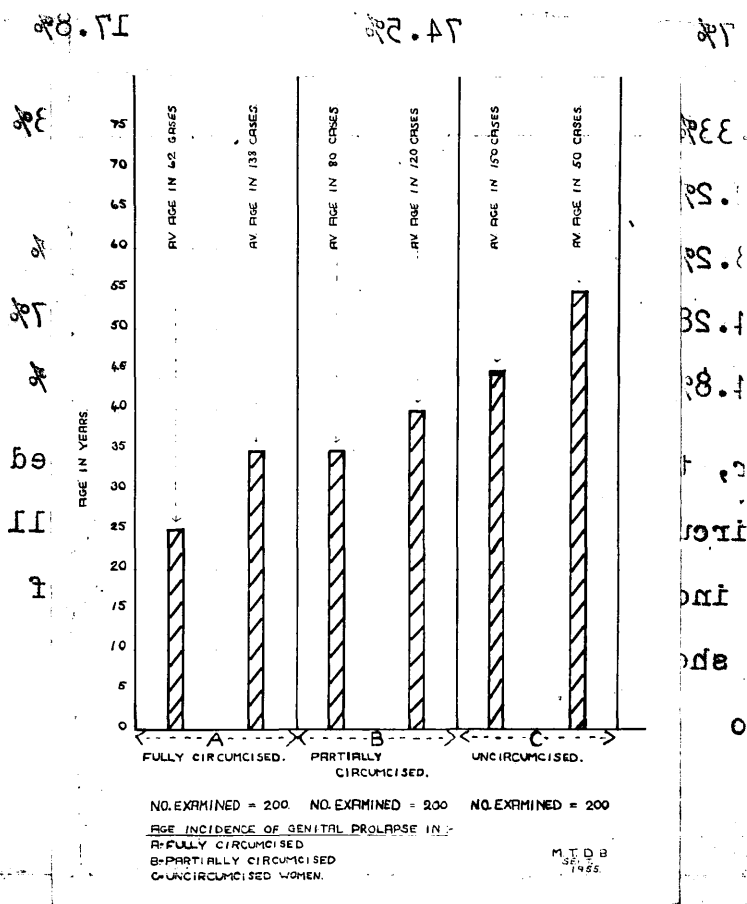
<u>Clan</u>	<u>Uncircumcised</u>	<u>% Fully Circumcised</u>	<u>% Partially Circumcised</u>
Ibos	7.7%	74.5%	17.8%
Ofutop & Olulumo	2.33%	72.09%	25.58%
Ekoi	22.2%	71.1%	6.7%
Ibibios	18.2%	63.6%	18.2%
Efiks	14.28%	57.14%	28.57%
Ogoja	34.8%	30.4%	34.8%

If, however, the percentage of fully circumcised and partially circumcised are taken together, it will be found that % incidence of this custom in order of magnitude is as shown :-

Ofutop & Olulumo	97.67%
Efiks	85.71%
Ibos	92.3%
Ibibios	81.8%
Ekoi	77.8%
Ogoja	65.2%

(d) The incidence of "No Tear" is highest in the uncircumcised, intermediate in the partially circumcised, and least in the fully circumcised.

(e) Genital prolapse arising from tears of the perineum and stretching of the pelvic floor is commonest among the fully circumcised, intermediate in the partially circumcised and



8.77

Graphic representation of time of appearance of Genital prolapse in women. The graph is self-explanatory.

least in the uncircumcised group.

(f) The superiority of Institutional delivery, where skilled attention is readily available, over Home deliveries is reflected in the higher incidence of "No Tears" and fewer 2^o and 3^o tears with their attendant genital prolapse.

(g) Most of the women prefer to deliver in their homes with all the risk of infection, perineal and other tears, and other obstetric risks, than institutional deliveries; this point is further discussed in a subsequent chapter - "Steps to be taken to abolish this custom".

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CHAPTER ELEVEN

Age of Appearance of Genital Prolapse:

Of 200 cases of genital prolapse studied in this series, 150 persons were fully circumcised women (75%) and the remainder (25%) were partially circumcised or uncircumcised women. The age at which genital prolapse occurred in the fully circumcised varied between 25 and 35 years. In the partially circumcised and uncircumcised groups, the average age was between 45 and 50 years. Thus genital prolapse occurred at a much

earlier age in the fully circumcised than in the partially circumcised or uncircumcised person. The explanation is to be found (a) in the higher incidence of second and third degree tears in the fully circumcised group, affecting the perineal body and Levatores ani muscles, and producing a weakness of the pelvic floor. (b) These tears are further encouraged by the fact that most women still prefer to deliver in their own homes where skilled attention is not available.

CHAPTER TWELVE

Social problems associated with female circumcision

These are discussed under the following headings :-

- (a) Difficulty in penetration by the male partner during sexual intercourse.
- (b) Sexual frustration leading to neurasthenia and divorce.
- (d) Frigidity during intercourse.

I have already referred to some of the properties of scar tissue - its inelastic nature, and that of fibrous contraction to as much as a quarter or more of its original length. Reference has also been made to the narrowing of the vaginal outlet to such an extent as to produce partial or complete occlusion of the vulvar outlet.

There are cases in which the narrowing of the introitus is such, that provided the male organ is not too large, penetration may be effected by commonsense measures, such as gentle manipulation, and by the use of a lubricant, e.g. vaseline.

These cases are to be distinguished from such conditions as over active Levatores ani muscles or sphincter vaginae liable to cause vaginismus; the tenseness of the sphincter vaginae and perineal muscles can be readily elicited by palpation.

There are cases in which penetration of the vagina by the male partner cannot be effected because the scar tissue resulting from circumcision has narrowed down the introitus to as much as 2 cms. or less. Where the orifice is occluded, a differential diagnosis of Imperforate hymen, or failure of canalisation of the vaginal canal has to be made (Novak, Curtis, Hamilton, Boyd and Mossman); the presence of scar tissue over the excised clitoris and labia minora, its continuity with the thin fibrous membrane over the introitus, a history of the non-existence of such an occluding membrane before circumcision, all serve to distinguish occlusion resulting from circumcision from such congenital conditions as im-

perforate hymen and failure of canalisation of the vagina, which may or may not be associated with other congenital abnormalities in the subject; furthermore, in these latter conditions which are not due to circumcision, the clitoris and labia minora will be intact.

The social problems created by these acquired abnormalities of the external genitalia are, a sense of frustration with a tendency to neurasthenia which results from an unconsummated married life. It may lead to infidelity in the husband, in difficult cases to divorce. An instance of this has already been given where the husband was obliged to take a new wife as he could not co-habit with his wife (see under remote gynaecological complications). The method of treatment of such conditions as narrowing of the introitus was also mentioned as was that for haematocolpos.

Sexual Frigidity in relation to female circumcision

One of the reasons offered by natives as a plea for female circumcision is that a woman who is deprived of her clitoris and labia minora does not get easily eroticised, and that if these structures are removed, she becomes chaste; also that circumcision acts as an

inhibitory agent on her libido. It was therefore felt that the relation of female circumcision to sexual responsiveness and the libido should be investigated.

In common usage, the term "Frigidity" implies absence of the characteristic erotic sensation in either the clitoris or the vagina. Psychiatrists use it in a slightly different sense. To them it denotes the condition in a woman where she is unable to reach ~~orgasm~~ for some intrinsic reason, in which the male partner is unaffected. Joan Malleson (1951) is of the opinion that the term should be reserved for the condition in which a woman lacks emotional or psychical response "to the particular sexual relationship under discussion".

There are many who believe that the attainment of ~~orgasm~~ depends on which area is eroticised- the clitoris giving rise to "Clitoral orgasm", or the vagina, giving rise to "Vaginal orgasm" In discussing the various factors which modify or affect sexual responsiveness in the female, the part played by various erogenous zones of the body will be touched upon..

Some psycho-analysts are of the opinion that vaginal stimulation and "vaginal orgasm" give greater psychological satisfaction to the female during intercourse than clitoral orgasm. Freud (1933) believed that before puberty, the clitoris is the main erogenic area, and that as a girl develops into budding womanhood, the clitoris surrenders its sensitivity to the vagina. Hitschmann and Bergler (1936) share Freud's views and add that "if the transition i.e. removal of the leading sexual zone of the clitoris to the vagina) is not successful, then the woman cannot experience satisfaction in the sexual act". Fenichel (1945) Kroger and Freed also share the views of Hitschmann and Bergler.

In the light of our study of human Anatomy, it is difficult to understand how the vagina, which is less endowed with sensory nerves than the clitoris in the phallic as well as the post-pubertal stage should be more sensitive; if a woman derives greater pleasure from vaginal penetration the satisfaction is purely psychological. Joan Malleson (1951) however states that three out of every four women in her investigation got clitoral orgasm, whereas only one out of every three got vaginal

orgasm.

Before discussing the effect of excision of the clitoris and labia minora on sexual responsiveness, it may not be out of place to define the term 'Libido'. It is "the animal desire for sexual indulgence". It is believed (Novak) that whereas libido is universal among normal males, it is less highly developed in females. The seat of libido is probably in the psyche (Novak). There are many conditions which can bring about sexual frigidity in a woman, e.g. lack of love for the husband, the presence of pathological lesions in the genital tract which produce pain during intercourse, psychic trauma resulting from painful honeymoon experiences, poor techniques of the male partner during coitus, an early puritanic upbringing in the girl's premarital life may produce an aversion for the act, as also the inhibition engendered by fear for pregnancy. In this discourse, however, what one attempts to find out is whether female circumcision can give rise to sexual frigidity, considering the role the clitoris plays in the uncircumcised in bringing about, at least clitoral orgasm. The clitoris, it may be recalled has much erectile tissue, and sensory end-organs (of Meissner and

Krause) particularly in the glans clitoridis. Clitoral orgasm depends on the effective stimulation of these end-organs. In the genital reflex of the female, stimuli arising in these end-organs are transmitted via afferents (possibly along autonomic nerve fibres) to the lumbar and sacral segments of the spinal cord. The efferent pathway is via the nervi erigentes or pelvic nerves composed of parasympathetic fibres (S.2 to 4) supplying vasodilator fibres to the external genitalia, producing erection of the clitoris and tumescence of the labia minora and vagina. (Curtis and Huffman).

With excision of the clitoris and labia minora, it is theoretically possible that the sensory portions of these structures having been removed, at least clitoral orgasm will be abolished. Perhaps this is the basis on which the belief that Circumcision aids chastity is founded.

If, as Joan Malleson (1951) observed that three-fourths of the women in her series had clitoral orgasm and one-fourth vaginal orgasm, then circumcision (clitoridectomy) should deprive three-fourths of such women from attaining clitoral orgasm.

Kinsey et alia found on examining nearly 4,000 women

that various areas of the genitalia possessed various degrees of sensitivity. Their findings are that the clitoris is the most sensitive area, but by no means the only one. Next come the labia minora and vestibule, then the labia majora, and least of all the vagina to tactile stimulation. Pressure, however, produced quite a considerable degree of response from the vagina. These findings confirm the importance of the clitoris and labia minora (which are excised in circumcision) in the act of coitus. Attempts were made by me to find out from 100 selected women, the effect of circumcision on (a) orgasm at coitus and (b) on libido. The answers received varied as might be expected. (1). There were women who were not prepared to give away the highly valued secrets of their sex. (2). There were those who because they had been circumcised at an early age had no comparison to make as to the degree of pleasure or satisfaction attributable to the uncircumcised state. (3). There were those who, because they were circumcised in adult life, and had probably engaged in sexual congress, were in a position to evaluate the effect of circumcision on their sexual responsiveness and libido before and after circumcision.

Those who were not shy admitted that circumcision,

be it Clitoridectomy, removal of the labia minora alone, or both structures, had no effect on their libido. This is to be expected because the desire of a female to be in the company of a male partner or vice versa, or the desire to engage in sexual congress is a purely psychic phenomenon. It is a characteristic of a living thing to react to its environment. Every individual has the capacity to modify his reaction to stimuli by virtue of his past experience. These modifications in an individual response to stimuli are brought about by a process of learning and conditioning. All human beings are born with inherent sexual capacities, but the pattern of sexual behaviour is modified by such factors as the home background, education and cultural influences, the individual's tribal social codes, psychic phenomena which are mediated through the various senses - eyes, ears , nose, touch, etc. It will be recalled that the dog in Pavlov's experiments, after a period of "Conditioning" required only the ringing of the bell at the appropriate time, to bring about a "psychical secretion". So too in man, association of ideas - the memory of past events, the sight of familiar objects, the hearing of certain forms of music, the smell of certain

odours and so forth, can either excite or inhibit one's Libido.

Circumcision and Orgasm. This was investigated in that group in which the women had had carnal knowledge prior to circumcision. Nearly 60% of these women averred that their ability to attain orgasm had not been materially altered by circumcision. They however stated that they attained their orgasm at a much later stage in coitus than they did prior to circumcision. The explanation is probably as follows :-

(a) According to the view of the psychoanalyst (Vide ante), there has been a transference (of sensitivity) from the clitoris to the vagina in the post-pubertal stage. This view does not receive the support of histological and physiological findings. (b) The findings of Kinsey et al show that there are other erogenous areas in the external genitalia besides the labia minora and clitoris; these structures being nearly as sensitive, could account for the persistence of, though delayed, orgasm.

Besides, even if the clitoris and labia minora be excised, there is an overlapping of sensory nerves in the various parts of the external genitalia, which could make good the deficiency in any other area. There are

also other erogenous zones of the body besides the genitalia e.g. the breasts, the lips, the nape of the neck, etc. (Kinsey et al) stimulation of which could eroticise an individual.

About 20% of those completely circumcised had never derived clitoral satisfaction in the pre-circumcision state, and only deep penetration gave them their pleasure. The most likely explanation is that these people do not require the presence of their clitoris for the attainment of orgasm, and probably fall into that small group who attain vaginal orgasm only (Cf. Joan Malleson).

An attempt was made to find out if circumcision produced complete ' anaesthesia' or frigidity. The result was negative. More than 80% of these circumcised in childhood were not frigid, and do have their normal orgasm. The explanation may be that in the absence of the clitoris and labia minora, Nature has concentrated or transferred the sensitivity to the other erotogenic tissues of the external genitalia.

The difficulty in the interpretation of the answers given by those interviewed is due to the fact that the approach to the problem is purely subjective. To elicit

information on a delicate subject relating to sex in any race is difficult, and is more difficult in the unsophisticated native than perhaps in the intellectual type. It would require the resources, and energy of Kinsey and his colleagues to investigate, thoroughly, this aspect of Circumcision on the Nigerian native.

Conclusion: (1) That although the clitoris is highly erotogenic, its excision in the adult with previous carnal knowledge (after a conditioned reflex had been established) does not deprive its former possessor of complete sexual satisfaction. Orgasm can still be attained in view of the overlapping of sensory nerve endings in the other external genital tissues which are not excised, which can still complete the neural reflex arcs responsible for the attainment of orgasm. The attainment of orgasm may be delayed, if the most erotogenic structures, the clitoris and labia minora are excised. Circumcision does not produce frigidity.

(2) Libido is unaffected by circumcision, be it partial or complete, as the various factors which modify it are mostly psychical, and to some extent through the blood hormone level of the individual. (The Pituitary, thyroid,

ovaries, and possibly adrenal glands).

It may be mentioned in passing, the effect of extirpation of the testes and ovaries in the human male and female, among other things, on libido.

Effects of extirpation of the testes: (a) Before puberty.

(1) Permanent sterility (2) No puberty changes as testosterone is absent (3) Accessory organs of reproduction do not develop, as are the male secondary sexual characteristics.

(4) The Epiphyses do not join in time.

(b) After Puberty: Sexual characters and accessory organs of reproduction depending on testosterone for their maintenance are depressed. There are certain characteristics and organs which once developed under the influence of testosterone, can carry out their functions without testosterone eg. the voice will not change, the size of the penis may not alter, the beard continues to grow. Sexual desire and erection may be absent, diminished or unimpaired: Human eunochs have sometimes been known to be promiscuous. (Samson Wright, Kinsey et al).

Effect of extirpation of ovaries: (a) Before puberty:

There is no record of the effect of extirpation of the

ovaries in girls. As in the male, it is likely that there will be no puberty changes, and secondary sex characters may not develop. Menstrual flow may not appear. The ovaries control these changes indirectly through the Pituitary.

(b) After Puberty: The genitals atrophy. Such Vasomotor changes such as "hot flushes" are common. Menstruation stops. The reports on the effect of extirpation on sexual desire are conflicting. It is often unaffected. Sexual desire in both men and women is modified by sex hormones, but may be independent of them, being determined principally by psychic and neural mechanisms (Novak, Samson Wright, Kinsey et al). Heightened sexual desire after ovarian atrophy in the menopause or ovariectomy for diseased ovaries has been recorded - the explanation being that the inhibition engendered by the fear of pregnancy has been removed.

The plea that removal of the clitoris and labia minora (circumcision) which have no internal secretion that could modify the activities of the body, is an "aid to chastity" is therefore untenable.

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CHAPTER THIRTEEN

Circumcision and Keloids

Keloids are overgrowths of scars, producing very

firm-claw-like processes of connective tissues. They project above the surrounding skin, and may be multiple or single, small or very large, appearing in practically any part of the skin surface. Familiar sites are the ears, neck, face, front of chest, and abdomen.

The exact cause is unknown. The dark races of the world, particularly Negroes show a greater tendency than the White races. Infection of wound is a well known predisposing factor. It usually appears in an injured area, in scars of burns, vaccination and tatoo marks, surgical wounds, and even in areas of insect bites. Tuberculous subjects are said to develop it more than non-tuberculous subjects. Both sexes are equally affected, and it may occur at any age. Heredity appears to play a part in the formation of Keloids.

A recent paper by Glucksman et al (1951) on the histogenesis of scar keloids suggests that keloids are examples of foreign body granulomata due to the presence of various particles in the tissues acting as foreign bodies. Furthermore, experiments showed that as long as epithelium intervenes between keratin or hair fragments and dermis there will be no foreign body reaction, and therefore no keloid formation. These

observers also stress that systemic factors may play a part in the production.

In a series of 120 circumcised women of various ages who had keloidal scars on various parts of their bodies (ears, over the manubrium sterni, on tribal marks, operation scars, etc.) investigated by me, it was interesting to note that not one of them had any evidence of keloid formation in the excised genital area. The absence of keloids in the genital area of all these 120 circumcised women who had keloids in other parts of the body whenever there was a previous wound is significant.

The question arises - what are the factors responsible for the immunity to keloid formation which the external genitals enjoy ? (a) Could there be a systemic factor such as endocrine activity which prevents the formation of keloids in the external genital area ? Why should there be this peculiar selectivity of tissues - are there local factors which inhibit the excessive proliferation of fibroblasts in the external genital tissues ? Curtis and Huffman describe the labia minora as cutaneous folds, consisting of a hair free integument resembling mucous membrane; it has an under-

lying vascular connective tissue. There is probably neither dermis nor keratin. The corpus clitoridis, although composed of erectile tissue is covered with skin.

The observations of Gluckman and his colleagues do not help in solving the problem - why the genitalia enjoy an immunity to keloid formation.

The following suggestion is offered for the immunity which the external genitalia appear to enjoy in keloid formation :-

- (a) These structures (Clitoris, labia minora) though differing very little in histological details from cutaneous folds in other parts of the body, are more like mucous membranes (in which keloids do not form) than skin. The amount of connective tissue in the tissues of the external genitalia is minimal.
- (b) The tissues of the external genitalia are relatively more vascular than skin surfaces in other parts of the body. The excessive vascularity probably restricts the excessive formation of granulation tissue.
- (c) There may be an endocrine factor inhibiting the excessive growth of fibrous tissues. The gonadal hormones are probably responsible.

(d) A local enzyme ("Fibrolytic") may be present in the secretions of the external genitalia, inhibiting the excessive formation of fibrous tissue.

It is interesting to note that although there was not a single instance of keloid formation in the genitalia in my series, Worsley working in the Sudan noted a 50% incidence in his cases. It may be that there is a racial difference - if so, what is this difference due to ? Most authorities who write on Keloids say that negroes are particularly prone to Keloid formation, as a matter of fact, more prone than other races. The Sudanese are not negroid.

CHAPTER FOURTEEN

Medico - legal aspects of Circumcision

The various ways in which identification of both the living and the dead can be established are clearly set out in various works on Forensic Medicine. In the present discourse, the aid which can be invoked from the scar resulting from female circumcision in identifying the living or the dead, is discussed.

A study of the distribution of female circumcision in Eastern Nigeria shows that certain tribes do not practise female circumcision at all. These are the

Mbembes, Yakurrs, and Bahumunu clans of the Cross River, the Eastern Ijaws i.e. Brass, Kalabaris, Andonis, Bonny, Okrika, Opobo, the Ogonis and Eleme clans of the Rivers Province; the Onitsha born Ibo too is not circumcised. In other tribes of Eastern Nigeria, female circumcision is the general rule, after the 8th day, excepting the Ekoi, Ofutop, Olulumo and Atam clans of the Cross River who perform circumcision as a pre-marital rite, that is, after the age of sixteen years.

If a female corpse was found, let us say, floating on a river, and it was found at post-mortem that female circumcision had been performed antemortem, the following inference could be made depending on the age :-

(a) If the subject is an adult of marriageable age, then the body could belong to any of the clans in the Eastern Region where female circumcision is practised. (b) If the subject is below the age of puberty, but is circumcised, she could not be of the Ekoi, Ofutop, Olulumo and Atam clans i.e. clans who circumcise just before marriage, usually about 17 to 20 years or more. (c) She could not belong to any of the clans of the Eastern Ijaw tribe who do not circumcise.

There are however other features which aid in

identification under such conditions e.g. tribe or clan marks on various parts of the body. The patterns and parts of the body on which tribal marks are made and their significance are described in ethnographic works; but a few examples of the aid which tribal marks can give when taken in conjunction with female circumcision in deciding the probable place of origin of a person, living or dead are given; (a) There are certain tribes whose characteristic tribal marks are tattoo marks of definite patterns or designs on the face e.g. the Asaba people. In other tribes, the distinguishing tribal mark may be 'teeth-filling' e.g. in Awka District in Onitsha Province. In yet another area, the tribal mark peculiar to the clan may be a series of tattoo marks in concentric circles placed on the malar regions (as in parts of Owerri Province). In the three areas mentioned (Owerri, Awka, Asaba), the women are invariably circumcised, but the pattern of tribal marks would help in locating the area from which the individual has come.

(b) The Ekoi, Ofutop, Olulumo and Atam women do not have tribal marks, and so the very absence of these help to distinguish them from other tribes who circumcise and

in addition have tribal marks.

Another interesting aspect of circumcision in the female is its aid in foretelling the social history of the individual. In the days of the old slave trade, many persons, including children of both sexes were sold into slavery or captured and taken as slaves by Slave hunters. Some of these children (if girls) had been circumcised (usually on the 8th day after birth) before being sold or captured as slaves. They grew up in their new environment which they regarded, in their adolescence or adult age, as their true home. Such persons grew up fully imbibing the customs of the new environment forced on them from childhood by slavery. On the surface (in the absence of tribal marks) it is difficult, if not impossible to say that they belonged to any tribe other than that to which slave trade had taken them.

An examination of the external genitalia in such cases provides interesting revelations. The following example is given to illustrate my point: A woman aged 60 years approximately was brought to hospital with a gynaecological complaint. In the usual history before examination, she gave her tribe as "Kalabari" i.e. one

of the Ijaw clans who never circumcise their women. Inspection of the external genitalia showed that she was completely circumcised. I surmised that she could not be a Kal^abari woman, but made no remarks. The interesting thing about this woman was that she spoke Kalabari dialect without any flaw, dressed and behaved like a typical Kalabari woman. In the course of conversation with a member of the Kalabari family to which this woman "belonged" revealed that she was taken a slave from Iboland to Kalabari in those 'evil' days when she was only three to four years of age.

There is also prevalent in certain parts of Nigeria what is known as "Child Marriage", that is the betrothal of a girl and her removal into the home of her future husband long before her menarche. She may be betrothed as early as six to ten years. By the time such a girl attains womanhood, she may have become completely naturalised in her new environment. Such naturalisation may make her indistinguishable on the exterior from the true natives of the place in respect of the dialect, mode of dress and general behaviour. The only indelible marks which may establish her tribal identity are (a)

Circumcision marks and (b) Tribal marks.

Here in Nigeria, it is sad to remark that in some areas the Police are occasionally faced with cases of kidnapping of children, or illegal trafficking of children which goes under the cloak of "marriage". Information may be sought, among other things, on the probable tribe of a kidnapped or "married" child. I am of the opinion that such features as whether the girl is circumcised or not, taken in conjunction with tribal marks, and of course if the dialect of the child is known, will establish her place or origin of birth.

CHAPTER FIFTEEN

Tropical and other pathological conditions found in the external genitalia of the Uncircumcised, and Circumcised Nigerian.

Of tropical conditions affecting the external genitalia, the following may be mentioned :-

(a) Elephantiasis: Manson - Bahr and others have reported cases of Elephantiasis of the vulva affecting the clitoris, labia minora, and majora. The casual agent is *Filaria Sanguinis hominis*.

In the whole series of cases examined by me, five cases were noted. There were 3 cases in the uncircumcised affecting the labia minora and clitoris, labia majora alone, and labia majora, L. minora and

clitoris. The remainder i.e. 2 persons were circumcised; the labia majora were affected. It is only possible to surmise here that if the clitoris and labia minora were intact, they too might have been involved. Here in the tropics, elephantiasis of the penis and scrotum is more common than the same disease in the labia minora and the clitoris. The higher incidence of this condition in the male is to be accounted for by the larger size of the penis and scrotum compared with their developmental counterparts in the female, and therefore a larger lymphatic system in the male. (The filarial parasite lives in the lymphatic system). In this series the incidence of elephantiasis is 5 out of 2,538 women examined i.e. under 0.2%.

This rather low incidence of a disease which is curable is no justification for excising the clitoris and labia minora in anticipation of the possible future attack by the filarial parasite.

Hottentot Apron: This is an overgrowth of the labia minora. Popular medical opinion holds the view that the labial hypertrophy of the Hottentots of South Africa is the result of repeated manipulation, or by the hanging of weights on the labia for personal adorn-

ment. Flower and Murie in their "Account of the dissection of the Bushwoman" quoted by Curtis and Huffman state that the labial hypertrophy is natural and congenital, and that these structures may assume tremendous proportions as to hang over the thighs.

This condition has never been seen in the Nigerian female. It may require excision if encountered.

(b) Lymphogranuloma Venereum: which is caused by a filtrable virus, and Granuloma Inguinale due to Donovan bodies are both common conditions affecting the external genitalia of the African female. These two conditions were found to affect the uncircumcised as well as the circumcised, in equal proportions.

(c) Epithelioma of the Vulva: There were only two cases seen in the series - an incidence of about 0.08%. These two patients were all uncircumcised females both over 60 years of age.

In one the right labium minus was affected as were the regional lymph nodes - the lower and upper groups of superficial inguinal lymph glands and the deep inguinal glands. In the other, the clitoris and labia minora were involved, as were the regional lymph nodes i.e. superficial and deep inguinal, and possibly ext.

iliac. They were inoperable - the growth had infiltrated much of the vulvar tissues, and had extended to the external iliac lymph glands, and possibly the lumbar and aortic lymph nodes. They reported at the hospital some two years after the initial vulvar lesion.

There does not appear to be any justification for the removal of a pair of useful structures in the sexual life of a woman, in anticipation of a disease (albeit a dangerous condition) which has a very low incidence. Carcinoma of the breast in the Nigerian female is more common, but we do not remove anybody's breast or uterus, or any organ for that matter in anticipation of a disease which may or may not affect it.

(d) Other conditions which affect the external genitals of other races also affect the Nigerian female, be she circumcised or uncircumcised.

(e) Praeputial Adhesions: It may be mentioned here that in five years of hospital practice in Eastern Nigeria, I did not come across a case of praeputial adhesions of the clitoris which the American authors, Remondino, Lane, Freeman and Stewart state to have

caused numerous psycho-somatic complaints in women, and claim cures after Clitoridectomy.

It is concluded therefore that the plea that the labia minora and clitoris are favourable sites for diseases and should therefore be excised in advance of the conditions likely to occur in them is untenable, and should be condemned.

CHAPTER SIXTEEN

Female Circumcision and the age of the Menarche

In the course of their nutritional survey in Sierra Leone, British West Africa, Wilson and Sutherland investigated the influence of initiation rites, including female circumcision on the onset of the menses in the African (December 1953 - February 1954). They compared their findings in Creole girls who were born in the Colony and on whom Circumcision was not practised with those girls born in the Protectorate where circumcision was practised between the ages of 12 and 13. As circumcision was practised just before the menarche, and as the ritual of circumcision was associated with "high emotional content.....it therefore seemed possible that the onset of menstruation might be affected". Their findings in these African

girls were compared with results obtained from 2,590 girls in the South of England (Wilson and Sutherland 1953). They concluded that neither the operation nor the initiation ritual "has any substantial effect upon the age of the menarche".

Here in Eastern Nigeria, births are not registered except in the large towns such as Aba, Port Harcourt and Enugu. About 90% of those who attend hospitals do not know their dates of birth.

Of the 2,538 women examined in this series, none had any record of their dates of birth, let alone the date or month of the menarche. As mentioned earlier, it is in the Cross River area that female circumcision is performed as a pre-marital ceremony, in most cases months or years after the menarche, or after sexual relationship with the male. The native operation on the clitoris and labia minora is a minor operation that does not last more than two to five minutes. The period of seclusion in the "Fatting Room" is one which most of those to be circumcised look forward to as period of rest, comfort and peace of mind; the outing ceremony which concludes the ritual is a period of great rejoicing and festivity for them. The average African

girl or woman belonging to an area in which the custom of female circumcision is in vogue, accepts the temporary ordeal of the short operation, with equanimity and good faith. Generations of women in her community and tribe had submitted themselves to this practice which is regarded as the "law of the land".

When the girl realises that "to avoid the pain would only mean probable death (as the people think) when her time for delivery arrives and what constitutes a greater incentive is that she knows no man will marry her unless she has submitted to the ordeal, he would not risk his dowry money on one who had neglected to conform to an institution believed in and practised for untold generations" - the short-lived pain of clitoridectomy is nothing to her especially as it is succeeded by a long period of rest and comfort, preparatory to marriage, to which the average native looks forward with great relish. It would therefore be surprising if the investigators (Wilson and Sutherland) had found that female circumcision had any effect on the menarche, which, as we know is influenced by such factors as endocrine development, constitution, race, heredity, and to some extent by climatic condition, and such individual factors

as the girl's environment, social status, general health and nutrition.

CHAPTER SEVENTEEN

Cases illustrative of points raised in previous chapters

A few cases have been selected from my records to illustrate various aspects of female circumcision.

Case 112: G.V. aged 16 years. Arochukwu, Ibo.

Complains of urine spattering over thighs at urination, and inability to have intercourse with her husband. On examination, clitoris and labia minora had been completely excised. There was a fibrous membrane stretching over the vestibule, and overhanging the ext. urethral orifice, so that when the patient urinated, urine did not take a projectile course, but spattered over the vulva and thighs. There was a fibrous ring round the vaginal orifice behind which was the hymen, unruptured and crenated, but soft. The fibrous ring could just admit the investigator's middle finger.

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Case 248: C.A. of Etomi, Ikom Ekoi Tribe. aet. 32 years. Roman Catholic. Completely circumcised. Scar tissue narrows down vulva, concealing upper 2/3 of vaginal orifice. Her complaint was that she had been

divorced twice because her husbands could not have sexual congress with her. The fibrous contraction was the cause.

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Case 305: I.A. of Ishibori (Ogoja). 18 years old. Nullip. Completely circumcised. Has huge keloids of both ears from perforation for inserting ear rings; she had no keloids on scar of excised clitoris and labia minora.

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Case 388: Illustrates the effect of intertribal marriage as a factor in diminishing the practice. B.M. of Umuahia is an Ibo woman aged 30 years. She, like all Umuahia women, is circumcised completely. Married to a Kalabari chief (Kalabaris do not circumcise). She had three daughters with him. None of them is circumcised.

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Case 460: L.E. para 5, gave her town as Okirka where women are uncircumcised. This case is of interest because this woman who speaks Okirka dialect without blemish was later found to be a native of Umuahia where women are circumcised. She grew up from childhood in Okrika. She identified herself with Okrikans who regard

themselves as superior to the Umuahia Ibo; her real tribe was figured out on account of the circumcision.

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Case 494: J.E. of Ekpakpa, Ikom. herself a "circumciser" was a patient of mine. She is referred to in the text as giving me first hand information on female circumcision. She was partially circumcised - the clitoris and only one labium minus were removed. She was circumcised at the age of 16. She bled for four days after the operation. The other labium minus was not removed on account of the free uncontrollable haemorrhage which ensued after removal of the clitoris and the right L. minus.

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Case 500: Illustrates the influence of education as a factor in abolishing the practice; N.O. 5 years old is the daughter of a Hospital Nurse. Her mother, an illiterate is circumcised; the father, a Male Nurse (comes from an area where circumcision is practised) would not submit his daughters to the practice. N.O. is uncircumcised.

Cases 622 and 630: are two girls whose parents are staunch christians. Their mothers were circumcised in youth before they were converted as christians. The two

girls are uncircumcised.

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Case 742: A.K. Owerri Ibo. 24 years. Prim. Complete circumcision. Not a trace of clitoris or labia minora. Scar tissue formed after excision narrowed upper $\frac{2}{3}$ of vestibule. Urethral orifice was almost included in the scar tissue. Case was seen as an emergency, in the hospital after prolonged second stage of labour. Foetal head was down in the perineum. Uterine contractions were good, but the head could not go past the undilatable vulvar ring which, on maximal bearing down by the patient produced an opening whose largest diameter over the foetal head was not more than $1\frac{1}{2}$ ". The transverse diameter of the pelvic outlet was 4ins. The foetal position was R.O.A. She was delivered under light anaesthesia after a bilateral episiotomy, incision of the scar over the vestibule, and low forceps. The child was moderately asphyxiated. Resuscitative measures brought it to life. There were several instances of this type - in some the babies were born dead from asphyxia, in others we managed to save them.

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Case 740: B.I. Itigidi. 17 years. Nullip. Complete

circumcision, with narrowing of vulva and upper 2/3 of vaginal orifice. Married. Coitus impossible. At operation the scar was excised and dressed with Tulle Gras; She is peacefully settled with husband after the operation.

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Case 764: E.N. 16 years. Complains of lower abdominal pain and swelling. Never menstruated. Examination revealed she had been circumcised at 14 years. The scar resulting from the operation had left an opening opposite the urethral orifice for urination, but had covered over the vaginal orifice, giving rise to Haematocolpos. At operation a cruciate incision was made, the retained fluid was let out, and the margins of the wound trimmed and dressed. She menstruated normally after the operation.

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Case 1025: Illustrates the use that could be made of circumcision scar as an aid in the identification of bodies: Following a fight which took place between two neighbouring villages A. & B. over land dispute, the Police requested that Postmortem examination should be conducted on the bodies of four persons who died. Two were women. P.M. revealed circumcision marks in one; the

other was uncircumcised. From a previous knowledge of the distribution of the practice among the tribes in the area, it was concluded that the circumcised woman came from village A., and the uncircumcised from village B. Subsequent investigation by the Police proved me right.

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CHAPTER EIGHTEEN

Ethnographic description of the ritual associated with female circumcision.

There is no ritual associated with circumcision in the child. Circumcision is performed, as already noted, on the 8th day after birth or soon after.

The ritual described below is that associated with female circumcision in the young adult or adolescent, and is performed as a premarital ceremony. First of all, it is to be noted that West of the River Niger, native professional circumcisers are usually women. They constitute themselves into a Union, and wear a special "badge of Office", which is a paddle-shaped brass token. This is attached to a necklace or it may be tied round the waist attached to a cord. Non-circumcisers are not permitted to know the rules of the Union of circumcisers. In the Eastern region, there are no such Unions. Men as well as women may circumcise, provided the person is

"This is a day of great festivity" See P. 141.



The author and his interpreter with the "Moninkims" (the "circumcised") on their outing day. The photograph was taken in 1953 at Ikom, Nigeria, when the author was on a tour of inspection of the Native Administration Dispensaries in that area. The Head of the village arranged the outing ceremony to coincide with the formal opening of a new Dispensary.

skilled in the art.

Soon after circumcision, the girl is transferred to a "Fattening Room". In this room the circumcised has to spend a period of two to three months for convalescence from the operation, and to prepare her body and mind for the marriage which usually follows the period of seclusion.

The circumcised parts are treated in the fattening room by the circumciser. The girl is not permitted to move outside the precincts of the room, and can only be seen by her immediate relatives and fiancé. Camwood powder and native chalk are rubbed freely on the skin, and these keep the body smooth and supple. In the "Fattening Room" the girl does little or no work, being cared for and attended by her relatives or mother. She is encouraged to eat in order to fatten - hence the designation "Fattening Room". At the conclusion of her period of exclusion in the Fattening Room, a day is chosen for an outing ceremony. This is a day of great festivity on which the girl is gorgeously dressed and ornamented. Lots of singing, dancing and merry-making mark the occasion; after this ceremony the girl is considered fully initiated for marriage, and believed to be

adequately prepared in mind and body to accept the joys and tribulations of marriage, and to play her part in the affairs of her village.

CHAPTER NINETEEN

Is the practice of female circumcision decreasing or increasing: What are the factors concerned ?

A custom which has received the blessing and sanction of generations dies hard. Although no one can state with statistical accuracy the incidence of female circumcision in any community in Eastern Nigeria say a decade or two ago, it is not difficult to find out if the practice is uniformly observed or not these days.

Among the tribes who inhabit the banks of the Cross River (Ekoi, Ofutop, Olulumo, Atam) there does not appear to be any decline in the practice now, compared with say 20 years ago. An explanation is probably to be found in the conservative nature of the natives of this area. This may be said also of the remote corners of Ogoja Province where the impact of Western culture has not been felt yet.

Female circumcision is practised least in the Rivers Province. The majority of the indigenous natives of the Niger Delta who are to be found in the Rivers Province

are ethnologically different from say the Ibos who practise it.

In Owerri, Onitsha and Calabar Provinces where female circumcision is mainly practised, there is a slight decline when compared with the incidence of the custom say twenty years ago.

The factors which are responsible for the decline are (a) The influence of the Church. (b) The Work of hospitals and allied institutions. (c) The general standard of education. (d) Greater facilities for travel and communication. (e) Increased intertribal marriages and other forms of social intercourse. (f) Social welfare work.

The Church: The part which the Church has played in the advancement of this country is unique. It has brought progress to this country in several ways - through the many schools established by voluntary Agencies, the medical missionary work and not the least through evangelical teachings, and women's guilds. To mention just one out of the several denominations in Eastern Nigeria, the Anglican Diocese of the Niger Delta prohibits the practice of female circumcision by regulation to the members of its church. The methods adopted

in the Onitsha Archdeaconry are here described. In the early days of inception of the Church in this area, missionaries gave lectures on the evils of female circumcision as and when opportunities presented themselves e.g. in the course of missionary tours. Discussion in various local committee meetings, and District Church Councils were held from time to time. Eventually it was decided to form a Joint Board which represented all the District Councils. The Board drew up its regulations prohibiting female circumcision among Church members.

To-day in Onitsha Town, the Niger Diocesan centre, and for a couple of miles around it, female circumcision is hardly practised. Whether or not this is due wholly to the influence of the Church is difficult to judge. The real Onitsha Ibos are unique in many respects from other Ibos.

Basden and other writers suggest that Onitsha people migrated from West of the Niger, from a part near Benin where female circumcision was, and is, not practised. If this view as to the origin of the Onitsha people is accepted, then there is reason to believe that the observance of non-circumcision of their women is the preservation or continuation of an old custom, and that

the

influence of the Church in this direction is to strengthen a belief or custom observed and cherished through generations untold. It is noteworthy that although female circumcision is not practised in Onitsha itself, villages and towns quite close to it and within Onitsha Province all practise it - thus negating the view that the Church has achieved much success to abolish the custom. Albeit, it is true to say that in all areas where female circumcision has been in vogue from the dim past, the few who are not circumcised and who forbid it are the christians in their locality.

Other denominations engaged in the propaganda against this custom are the Scottish Mission in Calabar and Ogoja Provinces, the Methodist and to some extent the Roman Catholics.

(2) The Work of Hospitals, Maternities and Allied Institutions:

In both Government and Voluntary Agency hospitals and maternities, lectures are given to mothers fairly regularly. These talks are given chiefly at Antenatal clinics where the dangers of circumcision are imparted to expectant mothers. Nowadays many more women deliver in Hospitals than was the case say ten years ago, and advantage is taken of this opportunity not only to prevent the remote

"The women in white"

Hamilton Bailey

"Today far more of our educated girls take up Nursing and Midwifery as a career than ever before. They see for themselves the dangers associated with circumcision, in the labour rooms and gynaecological departments. They can serve as useful agents in preaching against this custom."

Midwives at work in
The General Hospital,
Aba, Nigeria.

See page 146.



Native Administration
midwives in training, Aba
General Hospital Nigeria.

complications of circumcision, but with regular attendance at the Infant welfare clinics, mothers have been prevented from getting their female babies circumcised. It is hoped that with the expansion of antenatal supervision, infant welfare services coupled with lectures, much can be done to check this custom. Today far more of our educated girls take up Nursing and Midwifery as a career than ever before.

They see for themselves the dangers associated with circumcision, in the labour room and in the gynaecological departments. They can serve as useful agents in preaching against this custom. In the Health Services, our women engaged as Health Sisters or Visitors play a unique part in the crusade against this custom.

(3) Education, Social Intercourse, Intertribal Marriage:

It was found in the course of the investigation, that in areas where female circumcision was the rule rather than the exception, the few who were uncircumcised came from educated homes; or where the parents had been brought up in environments where circumcision was never practised. There were others who did not practise it because the women had been married by a man in whose tribe the custom is tabooed. Thus a Kalabari (Ijaw) man (females

are not circumcised in his area) marrying a circumcised Ibo woman would forbid circumcision of his daughters, and they in turn, their own daughters. With increasing means of transport, and better understanding among the various tribes, more intertribal marriages take place now more than ever, and therefore female circumcision is tending to decline.

The crusade against the practice of female circumcision:

The problem of female circumcision is as old as the hills; it has occupied the minds of sympathetic observers in various parts of the world, particularly in Britain.

In the sixteenth century, A.D., attempts were made by the Roman Catholics in Abyssinia to prohibit female circumcision among its African members. Sequeira quoting H. Ploss states that as a result of this prohibition, uncircumcised African female converts could not find any man to marry them. When this matter was referred to Rome, a surgeon was sent to Abyssinia to investigate it. He observed that Abyssinian women were endowed with abnormally large clitorides and labia minora; in his opinion there was an indication for their excision (in other words the surgeon encouraged female circumcision in Abyssinian women). He recommended

it.-

The Roman Catholic Mission in Abyssinia was thus obliged to condone the custom. One wonders if the problem which faced Rome at that moment was either to connive at a custom in Abyssinia which had nothing to recommend it, or else lose their female converts because they would not find husbands.

In 1931, the Duchess of Atholl M.P. made the following suggestions :-

- (1) "That all Colonial Governments should be pressed to make enquiries as to where the custom existed, in what form, and for what purpose".
- (2) "To consider how they would give legal protection to any girl who desired to be exempt from it".
- (3) "To consider what facilities could be given to girls who had reached puberty, and to make a statutory declaration if they wished to avoid circumcision".
- (4) "To take every opportunity to draw the attention of native persons and interests to the harmful effects of this practice on the race".

With these facts as a background, let us see what measures or weapons are available in the crusade against female circumcision.

-I am of the opinion that it will be futile for either the Government of Nigeria, or the Church, to make rigid legislation against the custom. Coercive measures in matters relating to native customs are bound to fail.

Dr. Basden, a C.M.S. Missionary who lived among the Niger Ibos in Onitsha Province (Nigeria) for over thirty years, struck the same note of warning in the opening pages of his book "Among the Niger Ibos". I am of the opinion that an "elevation of public opinion must precede any radical change in the customs of these races" (Sequeira).

It appears to me that the weapons in our hands against this custom are (a) Expansion of evangelical work and Christian movements (the women's guild etc.), whereby the evils of female circumcision might be preached to the natives.

(b) Expansion of hospitals, Maternity, Child Welfare and other social services where mothers may receive adequate treatment and be instructed on the evils of the practice: It is in these institutions that our midwives and female nurses can see for themselves the dangers associated with the practice, and will therefore be the agents whereby that knowledge can be propagated in their homes.

(c) Expansion of our centres of learning - the schools and colleges whereby the standard of life and education of the future generation can be elevated. It is from these that we can recruit a high level of opinion against the practice when they grow up.

(d) Expansion of the existing means of transport and communications whereby social intercourse and inter-tribal marriages could be encouraged.

(e) Increased propaganda by lectures at various centres, by radio, the cinema, and in Health week organisations.

(f) Lastly, as female circumcision is a widespread practice in various continents, it is a problem in which the World Health Organisation and the United Nations should enlist their sympathy and interest.

CHAPTER TWENTY

Views of the investigation on the practice of Female Circumcision.

I have shown in the preceding chapters, the various aspects of a custom which is widespread in many Continents; it is a custom that is deeply implanted in the religious and social lives of many races.

The study of this custom as it is practised in

Nigeria has not elucidated any one point in its favour; on the contrary, it has been shown that the practice is attended by immediate as well as remote surgical, medical, gynaecological, obstetrical, and social complications and problems.

It is a custom that causes a lot of suffering and ill-health to African women; it is a custom that is bound to affect the span of life of African women adversely, on account of the associated obstetrical, and gynaecological complications. It has brought misery and unhappiness to many husbands and wives.

When critically analysed, the practice has nothing to support the claims by its protagonists to perpetuate it.

It is a primitive, and barbaric custom.

I condemn it in its entirety.

CHAPTER TWENTY-ONE

SUMMARY

It is the investigator's view that the time has come for a critical analysis of some of the customs of indigenous natives with a view to preserving any

useful ones, and condemning those that serve no useful purpose, or are in fact dangerous and unprogressive.

Female circumcision was chosen for investigation mainly because of the bearing it has on medical practice in Nigeria; its extensive distribution in the Eastern Region of Nigeria warrants a study of this custom in this part of the Country.

The biblical and anthropological concepts of the practice are reviewed in Chapter 2. Chapter 3 deals with the investigator's method of study, and Chapter 4 with the geographical distribution of the custom in Nigeria, with special accent on Eastern Nigeria, and also in other parts of the world.

Chapter 5 is concerned with the reasons offered by natives for perpetuating the custom. In Chapter 6 the age at which female circumcision is performed by various tribes in Eastern Nigeria is tabulated; a comparison is made between Talbot's findings and the investigator's.

In Chapter 7 the method of circumcision including pre- and post-operative treatment is discussed. The methods adopted remind one of "barber" and pre-Listerian surgery, with all the complications of shock, haemorrhage, sepsis

and tetanus. Chapter 8 gives a brief description of the appearance of the external genitalia of some circumcised individuals, with sketches, and their legends.

In Chapter 9, the various complications and problems associated with the custom are discussed.

Chapter 10 gives statistical analysis of the findings of medical interest in circumcised and uncircumcised individuals; these are classified according to various tribes or clans in Eastern Region. The inference to be drawn in each case is noted. A general conclusion from the statistical analysis is also given. Chapter 11, deals with the age incidence of genital prolapse (a) in the circumcised (b) the uncircumcised, giving reasons for the difference. In Chapter 12, the social problems associated with circumcision are discussed. It gives a critical analysis of some of the reasons offered in favour of female circumcision e.g. that "it is an aid to chastity" - a view which is not shared by the investigator. The effects of female circumcision are compared with (a) Extirpation of the testis. (b) The ovaries.

Chapter 13, deals with the relation of female circumcision to Keloid formation in the external genitalia.

No satisfactory explanation has been found for the immunity which these structures enjoy. Suggestions are given. The contrary findings of Worsley (1938) are noted.

The Medico-legal aspects of the custom are discussed in Chapter 14.

Chapter 15, deals with the incidence of the diseases of the external genitalia of the circumcised as well as the uncircumcised with special accent on tropical diseases which affect these tissues.

Chapter 16, deals with the findings of Wilson and Sutherland on the effect of circumcision on the age of the menarche; these findings are reviewed.

In Chapter 17, a few case histories illustrative of points raised in preceding chapters, are given.

Chapter 18 gives a brief ethnographic description of the ritual associated with female circumcision in Eastern Nigeria.

Chapter 19, deals with the factors which are responsible for a decline in the practice in certain parts of Eastern Nigeria, and concludes by suggesting methods whereby the custom could be abolished.

In Chapter 20, the views of the investigator on the custom of female circumcision are given.

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BIBLIOGRAPHY

1. Baird Dugald: Combined Textbook of Obst. and Gynaecology. 5th ed. 1950. Livingstone: Edin. Various chapters.
2. Dr. Basden G.T.; "Niger Ibos". Publishers: Seeley Service & Co., London. Various chapters.
3. Beadnell, C.M: Circumcision and clitoridectomy as practised by the natives of British East Africa. Brit. Med. J. 1905, 964. i.
4. Berkeley and Bonney: 5th ed. Gynaecological Surgery, 1947. Cassell and Co.Ltd., London. pp. 102-109, pp. 134-139. Chapter xx.
5. Brassington, H.W: Notes on female circumcision as practised by the Ameru. Brist. Med. chir. J.1932, 49, 237-40.
6. Browne, F.J: "Antenatal and postnatal Care". 7th ed. J. & A. Churchill, London. 1951. Various chapters.
7. Browne, F.J: "Postgraduate Obstetrics and Gynaecology". Butterworth & Co.London. 1950. Various chapters.
8. Burns, A.C: "History of Nigeria". 1929. George Allen & Unwin Ltd., London.
9. Curtis and Huffman: Textbook of Gynaecology. Saunders Ltd., London. 1951. Various chapters.
10. Freeman, R.G: Circumcision in the masturbation of female infant. Trans. American Pediat. Soc. 1914. 26, 57-60.
11. Glaister John: Jurisprudence. 9th ed. 1953. E & S. Livingstone, Edin. Chapter 3. Page 68 et seq.
12. Gore, Charles et al: A new commentary on Holy Scripture including the Apocrypha (1928). Various chapters.
13. Gray's Anatomy: Descriptive and applied. 30th ed. pp. 1958 - 1961.

14. Hamilton, Boyd and Mossman: Human Embryology. 1947. Heffer Cambridge. pp. 201 - 220.
15. Illingworth, C.F.W. and Dick, B.M.: Surgical Pathology. 6th ed. 1949. Churchill, London. p.78.
16. Jonnini: Circumcision of women (from "Sonnini's Travels"). Caledonian Med. J. 1904, 6, 21 - 23.
17. Kinsey et al: "Sexual behaviour in the human female". 1953. Saunders Co., London. Various chapters.
18. Lane, C.E.: "Remarkable results following female circumcision." J. Amer. Inst. Homeopath. 1940, 33, 155 - 56.
19. Laycock, H.T.: "Surgical aspects of female circumcision in Somaliland, East Africa. Med. J. 1950, 27, 445 - 50.
20. Leith-Ross, S: "African Women". Faber and Faber Ltd., London. p. 104.
21. Malleson, Joan: B.M.J. Saturday Dec. 22, 1951. p. 1480 et seq. "Sexual disorders in women".
22. Manson's Tropical Diseases. 12th ed. 1948. Cassell & Co.Ltd., London. Pp. 727 - 734.
23. Meek, C.K.: "The Northern Tribes of Nigeria". Various chapters.
24. Novak and Novak: Textbook of Gynaecology. 4th ed. Williams & Wilkins Company, Baltimore. Various chapters.
25. Remondino, P.C.: "History of circumcision from the earliest times to the present". Phil. London. 1891. Various chapters.
26. Romanis and Mitchiner: Surgery. 7th. ed. 1944. p. 24. "Affections of Scars". Churchill, London.
27. Sequeira, J.H: "Female circumcision and infibulation". Lancet, 1931, 2, 1054 - 56.

28. Stewart, D.H: "Circumcision of the preputium clitoridis". Amer. Practit. 1912, 46, 216.
29. Talbot, P. Amaury: "Tribes of the Niger Delta". Northumberland Ave., London. Various chapters.
30. Talbot, P. Amaury: "Ethnology of the people of Southern Nigeria". Vol. 11. 1926. Cap. xix. and Table No.14.
31. Solomons Jnr. Bethel: "Keloids and their treatment" - The Practitioner no. 1,007. Vol. 168. May 1952. pp. 465 - 468.
32. Wallis, W.D: "Introduction to Anthropology" Harper and Brothers, New York. pp. 289 - 290.
33. Worsley, A: "Infibulation and female circumcision; a study of a little known custom". J. Obstet. Gynaec. Brit. Empire. 1938. 45, 686 - 91.
34. Wright Samson: "Applied Physiology". Oxford Medical Publications 1952. Chapter xi.

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THE END

REGIONAL, PROVINCIAL & DIVISIONAL MAP

