Henry Mason. Mrs. Tew
Mrs. C. Eng

Phimosis

By the term phimosis is understood a morbid condition of the prepuce or foreskin, on account of which it cannot be retracted, or can only be retracted with difficulty, so as to uncover the glans penis. Two distinct classes of cases are included in this definition, viz, those in which the opening is so small that it is mechanically impossible for the glans to pass through, and those in which adhesions have formed between the prepuce and the glans, the contraction of the prepuce not being an essential feature. These conditions may be called respectively, the contracted prepuce, and the adherent prepuce. There is no hard and fast line between them, since where we have the contracted prepuce, there is very generally some irritation of the glans and very often adhesions. The reverse viz.

adhesion and irritation without contraction, is more common, and it is to this class of cases more particularly that I wish to call attention, since I believe that they are of very frequent occurrence and often overlooked as a cause of illness. The difference between the contracted and the adherent prepuce is not only pathological, but it is also clinical, the symptoms in the former, which result directly from mechanical impediment to the flow of urine, being quite distinct from those in the latter which are probably due to reflex irritation. I have not alluded to the elongated prepuce, since it is not likely that this of itself will have any influence in causing morbid symptoms. It is very commonly associated with contracted prepuce but not necessarily so.

Before proceeding further it will be well to mention a few anatomical considerations which are of importance. The length of

the prepuce beyond the glans, and its degree of contraction, vary much with the individual, being much greater relatively in the infant than in the adult. In the majority of male children, it projects from a quarter of an inch to half an inch beyond the glans, and can easily be retracted over it. The integument covering the penis, and forming the prepuce, is remarkable for its extreme thinness, and its looseness of attachment to the parts beneath, except where it is reflected from the cervix over the glans, and here it is so adherent that it is almost impossible to separate it. It contains no fat. Around the cervix, certain sebaceous glands are found, the glandulae odoriferae or Tyson's glands. The excretion of these is said to contain caseine in large amount; and if it be not removed becomes readily decomposed, causing considerable irritation. This is, I

believe, by far the commonest if not the only cause of the adhesions between the prepuce and the glans, which are so often met with in young children. The necessity therefore of attention to the part should be impressed upon nurses, so that it may be cleansed frequently and no excretions allowed to accumulate, care always being taken not to have the prepuce retracted but to replace it.

Phimosis is either a congenital or an acquired affection. In the great majority of cases it is congenital. Although it very frequently happens that nothing abnormal is noticed for months, or it may be even years, after birth, still we often have reason to believe that, in many cases where ill-health results from phimosis there has always been an elongated and contracted condition of the prepuce, and that no attempts at proper cleanliness have been made.

In many cases the elongated and contracted prepuce is distinctly hereditary. Mr Bryant states that he has often known it to be so, and quotes one instance where a father and five sons all suffered from it. I have known a father and three sons affected with it, and requiring operations.

Acquired phimosis in the adult is usually the result of inflammation from a gonorrhoea or a chancre. The irritation caused by the sore or the discharges produces inflammatory swelling and infiltration of the prepuce, so constricting its orifice that it is impossible to retract it over the glans. In the child the irritation is usually caused by neglect in washing away the excretions of Tyson's glands. In this case as a rule the inflammation is not so acute, and causes no perceptible swelling, or even attracts no notice whatever. It results simply in adhesions between the glans

and the prepuce. Occasionally however it is more severe and may even cause balanitis with purulent discharge, simulating gonorrhoea. In the latter case attention is soon called to the part, and as a rule the affection is easily remedied by attention to cleanliness, or if necessary circumcision. The former condition if slight, may persist for months or years, and give rise to little or no inconvenience, and ultimately in process of development, the adhesions may be torn and the parts return to their normal condition. It may however interfere seriously with the health of the child and give rise by reflex irritation to the most serious morbid states without being recognised as the cause.

Morbid conditions affecting the genito-urinary system, resulting from phimosis.

Balanitis or inflammation of the glans has

X' The term balanitis is usually limited to those cases where there is purulent discharge, but etymologically it may be applied to either condition

just been alluded to as a consequence, and shewn to result according as it is chronic or acute either in adhesions or suppuration. When it takes the suppurative form, there will generally be found on circumcision, small ulcers around the corona caused by the irritation of retained excretions.

Paraphimosis is very apt to ensue, when the contraction of the prepuce just allows the glans to pass through. If it be kept long in this position it quickly swells and becomes difficult to replace.

Irritability of the bladder, as evidenced by the frequently repeated attempts to pass urine, is probably one of the earliest and most frequent results of phimosis. It may be brought about in a two-fold manner according as it is caused by an adherent or an extremely contracted prepuce. In the former case it is the result of reflex irritation.

X' Golding Bird — Medical Times & Gaz. 1885 Vol. II p. 43
Price — Rankings' Abstracts 1861 vol I p. 261.

In the latter, the actual obstruction to the flow of urine causes the act of micturition to be incompletely performed, only a small quantity being voided at a time, just so much as will suffice to relieve the bladder for a little while, and then the act has to be repeated with the same partial success. After this condition has lasted some time extreme hypertrophy of the bladder may result.[X] The general health of the child suffering from it, is sure to be affected in some way or other. He is often ill-tempered, cries on being touched and is not readily amused. He wakes up frequently during the night and voids a little urine, and it will generally be found on careful observation that whenever the act of micturition comes on, night or day, he has a crying bout which lasts until the bladder is relieved somewhat. He does

not gain flesh and weight, but becomes pale and flabby, the abdomen is often full and rather hard, and constipation or diarrhoea especially the latter may be present. In such cases as these, after circumcision or a slitting operation has been performed, the health rapidly improves, and nurses often express surprise at the great quantity of urine which is passed for some days afterwards.

The adherent and contracted prepuce is I believe the commonest cause of vesical irritability in the child. It is rarely the cause in adults.

Irritable bladder of course is only a symptom and is met with in many other conditions, such as calculus, stricture enlarged prostate cystitis, thread worms in the lower bowel &c.

<u>Enuresis</u> The contracted or adherent prepuce

X¹ Lancet 1892 Vol II p. 593

X² London Medical Record April 20th 1888.

is a very common cause of incontinence of urine. Mr J. Cooper Foster says that nine-tenths of the cases in children are due to it.[X1] This is doubtless an over-estimate, as the following statistics by Dr Townsend will show. According to the latter out of 355 healthy children of both sexes 77 that is 21.69 per cent had incontinence. Of these 42 were boys and 35 girls. Of the 42 in only 8 or 19 per cent was it attributed to long or adherent prepuce.[X2]

Incontinence is sometimes associated with the irritable bladder which has just been considered. It may be supposed that during sleep the sphincter muscle at the neck of the bladder, which is under a considerable pressure from its over-distended condition relaxes and allows the urine to dribble away. This explanation may apply to a certain number of cases, but in the

majority the incontinence is of a more directly paralytic nature, the result of reflex irritation from an adherent prepuce. This latter explanation will be more in accord with the theories regarding incontinence when it occurs after diphtheria, measles, in the course of paralytic diseases, or when it is the result of venereal excesses or masturbation. In all these it is regarded as the result of a paralysis.

The analogy between phimosis and the two last mentioned conditions is indeed very close and attention has been called to it by Dr Lewis Sayre in his work on Orthopaedic Surgery. He points out that in some cases of adherent & contracted prepuce, the penis is in an almost constant state of erection, and as the result of this excitement, paralysis in various parts of the body may occur, just as in

excessive venery, there is profound physical and nervous prostration, and sometimes paralytic symptoms.

The pathology of enuresis from phimosis resolves itself therefore into these two forms — first, when it is the result of contracted prepuce only and is merely the unconscious overflow from a distended bladder and secondly, when it is caused by adherent prepuce, with or without contraction and is of the nature of a reflex paralysis of the sphincter vesicae. Circumcision, is an operation short of this if it be thought sufficient will generally be attended with success.

Numerous illustrative cases are recorded in medical literature. Mr Bryant sends two in the Med. Times & Gaz. 1868. Vol II p. 525, Trousseau another in the Lancet 1860 Vol I p. 336 Dr Otis two cases in the Lancet 1875 Vol II p. 117, Dr F. B. Wood, one in the Med. Press & Circular

1869 vol. II. The last is that of a patient aged 14 years who had been troubled from childhood to such a degree that the urine was passing from the urethra almost constantly night and day. The penis had an elongated prepuce which was firmly adherent to the glans. After the performance of circumcision and the removal of the adhesions the incontinence entirely ceased.

Retention of urine as well as incontinence occasionally results from phimosis. Sometimes the contraction of the prepuce is so extreme as to offer the greatest mechanical impediment to micturition. The aperture may be so small as to be difficult to find, and the urine can only escape in a very diminutive stream or dribble away in drops, under such circumstances the prepuce itself may become distended and we have what is called "ballooning". Dr Dibble of Albion, Michigan,

X' Lancet — 1881 vol II p. 862

reports a case of this kind when the distended pouch formed a supplementary bladder measuring 9 inches in circumference X'

In ordinary cases of retention from this cause there is generally I believe some adhesion giving rise to reflex irritation. It is often impossible to say in what manner retention is produced whether by paralysis of the bladder or spasm of the sphincter. In the earlier stages it is more likely to be from spasm; in the later from paralysis. It is also possible for it to co-exist in the paralytic cases with incontinence, a condition very likely to give rise to mistaken diagnosis, since the frequent dribbling of urine, would not lead one to expect retention. Examination of the abdomen by palpation or percussion, or the passage of a catheter would easily decide the question. Five cases of retention from

phimosis are given by Mr. Bryant in the Med. Times & Gaz. 1868 Vol. 1 p. 525. One of these may be quoted as an illustration:—
H. B. aged 20 mo. was admitted suffering from retention of urine. For six weeks past he had had difficulty in micturition. He had once passed three days without micturition, and often two days. There were firm adhesions between the glans and the prepuce. After operation the child got well in a few days.

Priapism has already been noticed as a common result of phimosis. A case of the kind may also be quoted from Mr Bryant:—
A child aged two years was said to have had erection from birth. The mother had never seen it in a different condition. There was no difficulty in micturition. When about 11 mo. old the patient had had what was called tetanus, i.e. fits, which were followed

X' Medical Times & Gazette 1852 Vol III p. 259

by wasting of the legs. The limbs were then feeble. The priapism disappeared after circumcision was performed. It is not stated whether the prepuce was adherent or contracted only.

<u>Extravasation of urine</u> is not likely to result from uncomplicated phimosis, but when it occurs after an injury the existence of a tight prepuce would cause great aggravation as the following case by Mr Paget will testify:— A child aged 2 1/2. was admitted into hospital on Aug. 15th 1852. He had elongated and contracted prepuce from birth. About a fortnight before admission he fell off the edge of a chair, and slightly bruised some part of the genitals. Nothing wrong was noticed until two days before admission. He then complained of severe pain in the perinaeum, and could not pass water. Next day the scrotum and penis were much swollen, and all the signs of urinary infiltration present. The prepuce which was greatly distended was slit up, and then the diminutive flaps

X' Ormsby Hist. Press Pliscular 1883 Vol I p. 292.

buried in the swollen parts was seen," and by "its side a large sinus extending close to the "urethra backwards towards the pubes, and which "looked as if caused by the effused urine "making its way forwards". A catheter was passed into the bladder and free incisions made into the parts. Recovery ensued ~~with~~ only one or two small sloughs forming about the prepuce.

<u>Warty growths</u> attached to the glans and around its base, are much commoner in those who have long phimosed foreskins than in normal individuals

<u>Cancer of the penis</u> is also said to be met with more frequently in those who have always suffered from a greater or less degree of phimosis. Out of twelve cases of amputation of the penis for cancer performed by Mr Hey, nine had phimosis[X]. Dr Cadell in a paper read before the Medico-Chirurgical Society of

X^1 Rankings Abstracts 1873 vol II p 243

X^2 Rankings Abstracts 1861 vol I p. 261

X^3 Page 22

Edinburgh also supported this view, but at the same meeting Prof. Lister stated that he had seen a large number of cases of cancer of the penis but not one of them had phimosis.[X1] In spite of this experience the general opinion among surgeons seems to be in favour of the view that cancer is somewhat predisposed to by the existence of phimosis

According to Mr Price pain and swelling of the testes have been observed to attend congenital phimosis.[X2]

Haematuria occurred in one of Mr Bryant's cases the details of which are given below.[X3]

A condition very similar to contracted prepuce and capable of giving rise to many of its symptoms is contraction of the meatus urinarius. It is by no means uncommon, and I have had one case where it co-existed with phimosis and required a second operation, the deport not being noticed when circumcision was performed.

X' Lancet 1876 vol I p. 169

X² Ormsby, Morgan, Bryant, Ferguson &c

It is more closely allied clinically to stricture of the urethra. Mr Furneaux Jordan says he has seen it give rise to all the symptoms of stricture and even epididymitis and ischuria.[x1]

It has been frequently remarked by surgeons,[x2] and from the considerations in the foregoing pages it is evident that phimosis may produce all the symptoms of calculus in the bladder. Frequent and painful micturition, incontinence, intermittent flow of urine, haematuria, tenesmus, &c may all result from it. The only certain method of diagnosis is, of course the introduction of the sound. The possibility of calculus coexisting with phimosis should not be lost sight of. It is not likely that calculus ever results directly from this condition, but ~~the stone~~ when once formed its growth will be more rapid and symptoms more marked on account of the phimosis and the partially stagnant

X' Lancet 1872 Vol II p. 893.

X² Lancet 1878 Vol II p. 119

state of the urine, and irritable condition of the bladder induced by it. One case of the coexistence of calculus & adherent prepuce is recorded by Mr Firth[X1]. Another occurred in Mr Clark's wards in the Glasgow Royal Infirmary at the time I was house-surgeon. In the latter the prepuce was much elongated but not adherent, and only moderately contracted. The opening was just small enough to repress the passage of the glans. Circumcision was required about three or four weeks after the lithotomy since the perinæal wound did not heal. It then closed rapidly.

Disorders of the alimentary system, and abdominal organs generally

Hernia has been noticed by almost every surgeon of experience as a common co-incidence with phimosis. Mr Kempe of the Sick Children's Hospital, Great Ormond St. London, observed[X2] that out of 50 consecutive cases of phimosis

admitted into that institution, 31 had rupture. In five of these it was double inguinal, and in many umbilical as well. Umbilical alone was not counted. In none of these cases was the rupture noticed at birth. It is not difficult to understand the reason of this co-incidence. The obstruction to the flow of urine causes an increased power of contraction on the part of the abdominal muscles, and this rendering the pressure in the abdominal cavity much greater than normal, tends to protrude some of its contents at the weakest point. Stricture of the urethra acts in a precisely similar manner, and is occasionally met with as a cause of hernia. The application of a truss in this form of hernia would be almost useless. A single truss indeed, if properly applied would tend to produce a double hernia.

Closely allied to hernia, and induced by

X' Mew. Times & Gazette 1868 vol 2 p. 525.

phimosis in a similar manner is <u>prolapse of the rectum</u>. This is often associated with some disorder of the alimentary system, constipation, diarrhoea or some other cause of rectal irritation. Any of these causes are of themselves sufficient to account for it, but when associated with other conditions producing greatly increased pressure in the abdominal cavity, such as phimosis, whooping-cough &c. prolapse more readily occurs and is very difficult to cure unless these latter complications are removed. In the following case[X] which has been referred to in noticing haematuria the prolapse seemed to depend entirely upon phimosis. E. J. aged 4 years had difficulty of micturition from birth. At one time he had suffered from retention, at other times from incontinence. On several occasions he had passed blood with the urine after straining. His water would frequently stop

during its flow, and then go on again as in stone. Since he was eight months old he had had prolapsus. The bladder was healthy as also the bowel. The prepuce was very long and closely adherent to the glans. After circumcision all the symptoms at once vanished.

Vomiting, diarrhoea and constipation, especially the two latter are occasional consequences of phimosis. A remarkable case of vomiting from this cause occurred in the practice of my friend Mr A. Y. Brenner of this town. A child aged 9 mo. was brought to him having been troubled with obstinate vomiting from birth. No other symptoms beyond considerable emaciation were remarked. The vomiting took place almost immediately after anything had been swallowed and was of a most forcible character. The contents of the stomach were suddenly ejected even two

× prepuce was adherent and contracted after circumcision then vomiting ceased almost immediately.

is three yards across the room. The X
Diarrhoea with tenesmus, and sometimes
bloody stools, as a result of phimosis is more
common I believe in those cases where
there is extreme contraction of the prepuce
producing obstruction to micturition. The
reason of this is not far to seek. The sympath-
etic relation between the bladder and
rectum stimulate both to act at the
same time, the calls of nature are much
more frequent, there is more straining and
expulsive power employed, there is no weak-
ening probably of the muscular coat of the
bowel by reflex paralysis, and possibly also
there is considerably increased excretion of
water by the bowels to compensate for the
diminished flow produced by the obstruction in
the urinary passage. Everything indeed tends
to produce a relaxed state of the bowels, and
this I believe accords with clinical experience.

a considerable proportion of the cases I have seen have at one time or another suffered from it.

Obstinate constipation is now and then consequent upon phimosis, especially when this takes the form of adherent prepuce. It should be regarded, I think, in most cases as due to reflex paralysis or weakening of the muscular coat of the bowel. If hernia be present it is very apt to occur but here it is probably secondary. In the following case recorded by Dr Sayre in his "Orthopædic Surgery." this condition of the bowels was a prominent symptom. A child aged 3½ years was brought to Dr Sayre on account of paralysis of the lower extremities and prolapse of the rectum. "The child was very peevish and fretful, "very costive and the mother states that in "straining at stool and in making water "his bowel would frequently come down, and give

"his great trouble in pushing it up". He was circumcised and after fourteen days his paralysis was much improved "and his "bowels had become perfectly regular without "any prolapses". In this case there can I think be little doubt as to the paralytic nature of the constipation.

<u>Gastralgia</u>. Pains sometimes of a dull aching character, sometimes spasmodic or neuralgic, referred more or less vaguely to the abdomen, and causing frequent crying and screaming fits are not uncommon in patients the subjects of phimosis. In the Alienist and Neurologist for October 1881 Dr Saunders reports four cases of severe intermittent abdominal pain in male children between the ages of 3 and 8 years. Adherent prepuce was believed to be the cause and all the cases were immediately relieved on circumcising, or merely separating the prepuce.

<u>Abdominal Phthisis</u>. In individuals with a constitutional tendency to the development of tubercle, the existence of such irritation of the genitals as we frequently meet with in phimosis would tend greatly to accelerate the progress of the disease, and I believe would be sufficient of itself to act as an exciting cause. The following is the only case I have been fortunate enough to meet with bearing upon the question and I am not acquainted with any other in medical literature which will afford additional proof of my statement. It is not I think because such cases have been rare, but because nothing abnormal having been noticed in the appearance of the penis, and no complaint made it has not been thought necessary to examine it and the real cause has been overlooked.

Aug. 14th 1857. A child aged 10 mos. had been suffering for six or seven weeks from diarrhoea and occasional sickness. He had been remarkably healthy and plump before this, the

only ailment having been an illness of a few days duration, occurring about a week after birth, and characterised by jaundice, the yellow colouration being more intense than is usual in these cases. Since the commencement of the present illness the child had wasted very considerably except in regard to the abdomen and the head, both of which parts appeared very large in proportion to the rest of the body. The abdomen was firm, tense, and uniformly distended. There was some ascites, but the distension was due in part to flatulence. No bumps or indications of enlarged glands could be felt on superficial examination, and it was impossible to press deeply on account of pain. The head beyond its apparently large size, did not show any indications of hydrocephalus as to shape, state of fontanelles, &c. Every night it was covered with offensive clammy perspiration. The child was extremely ill-tempered, always fretful and crying, and at times screaming violently

restless from abdominal pain. He was half weaned, and his appetite was usually very poor, the food being frequently vomited. There had been diarrhoea all through the illness, the motions being extremely offensive, and sometimes looking like matter said as if they contained matter (pus). In regard to family history, the mother had lost two boys both of whom had been taken ill, with symptoms similar to the present patient, and died after a few weeks illness. They were said to have had consumption of the bowels. I prescribed some simple remedies without any good result. About a week after I was told on enquiry, that the child passed very little water, and on examining the penis I found an extremely contracted prepuce, the aperture being indeed rather difficult to find. Next day under chloroform I performed circumcision. There were two or three adhesions between the glans and the prepuce, which were torn across. Improvement seemed

to set in almost immediately after the operation, the diarrhoea soon ceased, the appetite improved, the quantity of urine excreted was greatly increased escaping in large quantities both day and night. The child gained flesh and went on as favorably as possible for a time. Two months afterwards he was again brought to me on account of a recurrence of the old symptoms, the mother stating that there was still something wrong with the penis. I examined it and found the cicatrix had contracted forming a phimosis as tight as before. I operated a second time taking care to remove sufficient foreskin, and inserting two or three sutures so that the wound might heal more quickly. The result of this was satisfactory and the child has been in good health since.

It is impossible of course to assert that this case was of a tubercular nature, but I certainly regarded it in that light when attending it. Had the

phimosis not been discovered and the case proved fatal, very few practitioners would I think have hesitated in signing the certificate to that effect. It would have been interesting moreover to have known more about the previous children who had died especially as to whether they were the subjects of phimosis which considering the hereditary nature of the malformation, I consider extremely probable.

<u>Diseases of the Nervous System</u>. These which may very be considered under two heads convulsion, and paralysis, depend usually upon adherent not necessarily contracted prepuce. The general symptoms of nervous irritability, which are met with in almost all morbid conditions resulting from phimosis have been briefly alluded to. The following case may be regarded as typical of this condition:—

S. C. aged 15 mo. fairly well nourished was said to have been quite well until two or three weeks ago. Then he began to have crying fits

especially in the night. He would wake up every three or four hours and have a crying bout for some minutes, in spite of all attempts at pacification. He was peevish and ill tempered during the day. This state of things grew worse; his limbs became flabby and soft; slight puffiness was noticed under his eyes especially in the morning (possibly the result of crying) and he was losing flesh. No attention had been directed to the penis, and it was thought that his ill-health was due to teething. On examination I found the prepuce largely adherent, but there was no contraction, and apparently no obstruction to micturition. With a blunt probe I tore the adhesions and directed the parts to be washed and regularly attended to. After this he slept well and his health rapidly improved.

<u>Convulsions</u> in children are a very common result of phimosis. Such attacks are analogous to those dependent upon the irritation of entozoa in the bowels. In frequently recurring convulsions affecting children, attention

X London Medical Review 1888 April p. 155

should be directed specially to the alimentary tract and the genito-urinary system. Teething is probably the commonest cause, next to that intestinal catarrh and thirdly plumbism. It is possible that in certain cases of plumbism where there has been extreme obstruction to micturition the convulsions are due in some measure to uraemic poisoning.

Under convulsive diseases may be mentioned <u>chorea</u>, of which I have quite recently had a case in which I believe an irritable larynx was the proximate cause. This affection, it will be remembered is most common in girls, between the ages of five and puberty, and occurs especially in families in which there is a tendency to nervous disorder. Rheumatism and inflammation of the pericardium or endocardium are met with in a considerable number of the cases (Roch. — Rheumatism 23.4 per cent. Cardiac disease 13.7 per cent).

William C. aged 4 1/2 years began to be affected with choreic movements about the end of February 1888

The family history shows a decided proneness to nervous affections. Both parents are well and have six other children besides the patient. The mother however in youth was very subject to hysterical fits. The eldest son aged 22 suffers for a time from nervous debility the result of onanism. One daughter used to have convulsions frequently till she was two years of age. Another aged 15 had chorea in May and June 1887 but not severely. She was perfectly free from it for a period of eight months before the present patient began with it. On Dec. 28th last she was taken ill with Scarlet fever and had a very severe illness. On the same day I saw the little boy, who. I was inclined to think at the time had also had Scarlet fever, though no rash or sore throat had been noticed. Later on I regarded his indisposition as due to a morbid state of the glands, which I subsequently discovered. He had then been ailing for about six weeks. No appetite. Always wanted to be left lying quiet, never play about. Bowels were confined

Urine deposited reddish sediment of urates, No albumen. Complained of pains in the legs and right foot. The right ankle was rather swollen this I thought being probably of a rheumatic nature. Perfect rest in recumbent position was enjoined for a few days and a milk diet ordered, No medicine was given. He improved under this and was soon able to move about out of doors. On February 23rd I was again asked to see him and found symptoms of chorea developing There were the usual involuntary jerking movements of the limbs head and body, the right arm and leg being especially affected. Associated with the choreic spasms was paralytic weakness of certain muscles. When walking he dragged the right foot along the ground instead of lifting it up. His speech was also affected words being slurred and pronounced indistinctly. He complained of aching in the right side of the forehead. When asked if he had pain anywhere else, he pointed to the genitals. On examination I found the parts well developed the penis being rather

long for a child of his age. There was no undue lengthening or adhesion or contraction of the prepuce, but the glans at its base and around the cervix with the corresponding inner surface of the prepuce presented a very red and irritable condition. The excretion of smegma was very considerably increased, and the mother stated that there had been an extraordinary quantity of white stuff coming from it, and she believed it had been in this state for some months past, but had not paid much attention to it. The child had frequent erections and the glans was tender and painful to touch. In view of the many disorders which I had learnt to attribute to phimosis and their similarity to the symptoms presented by the patient, I could not help attributing his ill-health and the development of the chorea to the morbid state of the genitals. By way of treatment I directed a weak solution of Permanganate of Potash to be thoroughly applied to the part twice a day and

X' Samuel 1869 vol I p. 209

gave Tinct Belladonnae internally. The local irritation was cured in about three weeks, but the chorea did not seem to be influenced by any remedies. It ran a rather severe course lasting about seven weeks. Weakness of the leg persisted for a few weeks longer.

Another case of chorea in a lad aged 8 years in which phimosis was regarded as the cause is reported by Mr Heckford in Vol II of the London Hospital Reports.

<u>Epilepsy</u> is very rarely a result of phimosis. Convulsive diseases in adults seem to be much less commonly due to this cause than paralytic diseases. I have only met with one case of epilepsy which seemed in any way connected with it. This was in a lad aged 10 years. He had had fits for two years or more and had always been rather idiotic. The penis was extremely small, the prepuce long and partially adherent round the corona, not contracted. I could not obtain permission for operation. Dr Allhans X'

X' London Hospital Reports Vol II

observed congenital phimosis in 11 out of 25 consecutive cases of epilepsy admitted into the London Infirmary for Epilepsy and Paralysis. This irritation he adds often leads to sexual excitement, masturbation and spermatorrhoea. A variety of cerebral symptoms may be induced, pain in the head giddiness, noises in the ears, eructation, sickness &c. Althaus considers it doubtful whether epileptic fits have been induced by it, yet the propriety of operating in such cases cannot be questioned, as all sources of irritation should be removed in convulsive disorders. Several of the cases were operated upon. In no case did the fits cease immediately, consequent upon the operation, yet it seemed as if the disease yielded more readily to the remedies employed than it had done before. Four cases of epilepsy healed by circumcision are given by Mr Hechford in his paper already referred to[X]. In these the epilepsy was doubtless induced by onanism. Circumcision was performed in all with decided benefit. Two subsequently relapsed

however and became as bad as before. Mr. Hackford in operating recommends free removal of the prepuce and as long delay as possible in the healing process, in order to prevent masturbation being practised. I am very doubtful of the wisdom of this procedure for it is apt to result in cicatricial contraction, and a recurrence of the phimosis, or if too much be removed a troublesome paraphimosis.

<u>Paralytic diseases</u> are much more frequent and of a more varied nature than the convulsive diseases resulting from phimosis. Just as in the adult from excessive venery and especially masturbation we find general debility of the nervous system and sometimes spinal paralysis resulting, so in the child the constant irritation of an adherent prepuce produces by reflex irritation many paralytic neuroses. Looking at the anatomical and physiological conditions, the genital organs being supplied mainly by nerves from the lumbar enlargement of the

× It is possible that this was a part of the chorus.

cord (pudic nerve) we should expect those parts of the body supplied by this portion of the cord to suffer accordingly. And this we find to be the case, neuroses affecting the lower extremities and lower trunk are by far much commoner results than neuroses elsewhere. Some of these have already been alluded to. In the cases recorded under chorea there was paralytic weakness of the extensor muscles of the right foot and of the organs of speech. Incontinence of urine and paralysis of the lower extremities have also been mentioned. The latter condition has been specially demonstrated by Dr Sayre in a series of cases described in his book on Orthopaedic Surgery.

The first is that of a boy aged 5 years suffering from paralysis of the extensor muscles of the legs (quadriceps extensor). Both knees were flexed to an angle of 45°. With a little force they could be extended to their normal length, but when relaxed they instantly became flexed again.

The prepuce was extremely adherent and contracted, the lips of the meatus just showing through the opening red and irritable. Whenever the vicinity of the urethra was touched "he was slightly convulsed and had a regular orgasm." Almost immediately after circumcision the child began to improve, and after the end of three weeks, was able to extend his limbs perfectly straight. After another fortnight he was able to walk alone. No medicine or other remedial agency was employed. The next case is a similar one only in this, the peroneal and extensor muscles of the feet were paralysed producing double talipes equino-varus. The result of circumcision in this case was equally beneficial. Another of Dr Sangris cases in which there was paralytic weakness of the legs with prolapse of the bowel has been detailed on p. 25.

From an analogy of these cases I think it extremely probable that some of the cases of infantile

X' Lancet 1872 vol II p. 552.

paralysis, progressive muscular atrophy, pseudo-hypertrophic paralysis, various local paralyses such as those affecting the muscles of the eye-ball, of the larynx, and the muscles of articulation may occasionally depend upon a morbid irritation of the glans. ~~Extra alone~~

Genuine <u>infantile paralysis</u> is I think of rare occurrence as a result of phimosis. It is not in the typical acute cases that it should be suspected so much as in those which develop gradually, and which fail to be influenced by drugs galvanism or any kind of treatment, which does not include removal of the reflex irritation, supposing this to be the cause. Mr Barwell des-cribes this kind of paralysis as follows:- It is commoner in boys than girls and usually begins between the ages of two and five. It develops itself slowly and is rarely or never com-plete, "one limb does not support the weight of the "body, so well as the other and moves more slowly.

"The foot hangs and is turned outwards; the ankle
"and if the case be old the knee also have
"yielded inwards, the whole limb is flabby
"and smaller than the other, rarely cold." In
the case of boys, phimosis will be found, in
girls some genital irritation as ascarides, a
highly acid state of the urine is primitive from
want of cleanliness. Mr Barwell relates the
following excellent illustration: —

"April 1870. S.C. act. 4 years, was strong and
"healthy, walked well till 15 months ago. He had
"seemed ailing and fretful for a week or two before his mother
"observed that he did not walk so well, and frequently fell.
"The evil increased and he was brought to me at the above
"date. The boy answers readily and is well mannered
"while being talked to and amused, but when left to
"himself falls into a vacant stare at nothing, seems
"lost. If spoken to while in this state, he often does not
"appear to hear, if addressed sharply and suddenly, starts
"and generally cries, if not is cross and peevish."

Galvanism, strychnine &c were tried without effect, and then on examination phimosis was discovered. Circumcision was proposed and accepted. The prepuce was narrow, almost entirely adherent save round the corona where thick secretions were stored. "The boy rapidly got better, and in a few days walked as well as ever".

Progressive muscular atrophy bears many points of resemblance to the form of infantile paralysis just considered, the chief point of distinction between them being the age of the patient, the former occurring at any age in affecting adults more particularly, the latter being confined to children.

General paralysis of the insane which is exclusively a disease of adult life, also presents many points of similarity with the disorders resulting from the reflex irritation of a phimosis. The cause is in some cases nearly identical, general paralysis being occasionally due to onanism. Similar convulsive and paralytic phenomena may

X' Lancet 1861 vol II p. 80

occur in both diseases. The limbs especially the lower extremities lose power, also the sphincter muscles of the bladder or bowel producing incontinence of urine or faeces. The speech especially is affected in general paralysis and this is occasionally the case as will be shewn presently in phimosis. Sight is sometimes impaired in both. The mental and moral symptoms can rarely be compared since in the phimosed patient they are not as a rule sufficiently developed. The analogy however may lead us to suspect, that in some such cases their development has been arrested and idiocy has been the result.

As an illustration of the effect of genital irritation in the adult the following case may be quoted from Dr Brown-Sequard[X'] A gentleman was the subject of insanity with general paralysis, which was suspected to be the result of inflammation

of the prepuce and glans with phimosis. After circumcision the patient was soon cured of insanity. Dr Legrand adds. "Shortly afterwards "he improved rapidly as regards the paralysis, and "he is now cured. This is a clear case of reflex "insanity and reflex paralysis"

<u>Pseudo-hypertrophic paralysis</u> is a disease affecting almost exclusively young males. Nothing definite according to Bristowe and others is known as to its etiology. The fact that it occurs almost entirely in boys and that it nearly always begins in the lower extremities which are supplied by the same portion of the spinal cord as the genital organs might lead us to suspect that these parts in the male had some peculiar relation to the disease. This appears to be borne out in the following case which is the only one I have had under personal treatment. The disease did not seem to result directly

from phimosis, but supposed upon the habit of masturbation contracted after the operation of circumcision. The patient a lad aged 8 years was brought to me on Sept. 23rd 1887. Fifteen months before he had been circumcised on account of local irritation from a contracted and adherent prepuce. His present illness dated two months back about which time his mother detected him in the habit of masturbating. By wise counsel and careful attention, she believed he was cured of it. Some of his present symptoms were noticed then, and have gradually become intensified since. He was said to be short-sighted and unable to see objects distinctly. This has improved and his vision is normal now. His mental condition however is much changed. If asked any but the simplest questions, he either gives a meaningless reply, or laughs aloud in a half idiotic manner. He seems

quite unable to fix his attention upon any subject for more than a few minutes. He is continually moving his body and limbs into various positions, his features all the time relaxed into a silly smile. He never complains of pain. On laying him down on the ground upon his back, he has some difficulty in rising. He turns over on his face, gets on his hands and knees, then raises his buttocks and seems to chivvy up his legs with his hands. The muscles of the legs are firm and show but little if any hypertrophy. The knee-jerk was entirely absent in the left knee and nearly so in the right. The disease developed itself rapidly and on October 1st he was decidedly worse. His behaviour was quite idiotic, and when placed upon the ground he could not rise at all without help. After this he began to improve and by the 14th of October he could get up without

X' Orthopaedic Surgery p. 66.

assistance and walk about better. The only medicines given were Extract of Ergot in 5 minim doses and Syrup of the Phosphates. His spine was rubbed night and morning with salt and water. I saw him last on the 25th of November when he seemed quite well both as regards mental and physical conditions. He could rise up quickly from the ground without awkwardness, the knee-jerk was normal in both legs, and he seemed indeed to have made a complete recovery.

Partial atrophy of the Optic nerves appears to have resulted from phimosis in the following case, which is related by Dr Sayre X'

"February 20th 1875. L. H., aged 34 (Germany), has "been married four months, very stout and active, "but very nervous, very easily tired; eight years "ago he began to have trouble with his eyes, "finding he could only read a little while at

"a time, and then getting so nervous he would
"throw his book away, and could not read
"again for some time; can now only read
"large print, and then but for a few minutes
"together.
"Has consulted various surgeons in Europe as
"well as in the United States, without deriving
"any benefit.
"Patient has never seen the glans penis; pre-
"puce being very tightly contracted and twisted
"to the right.
"Feb. 22nd — Divided the prepuce and uncovered
"the glans; mucous membrane very tough and
"thick, almost fibro-cartilaginous; was divided
"with bistoury down to corona and then stitched
"to tegumentary prepuce.
"At the end of a month the patient had entirely
"recovered his natural health, all nervous symp-
"ptoms having disappeared, and, strange to
"say could read a page of small print with

"facility and without any unpleasant result
"following" On Nov. 14th 1881 Dr Sayre
received the following reply from Dr Knapp,
who had sent the patient to him, in reply
to an enquiry in relation to the case.

"My dear Doctor: I recollect the patient well.
"His sight after the operation had materially
"improved, both as to acuteness and prolonged
"use. He has consulted me several times since.
"He has still incomplete atrophy of the optic
"nerves and moderate amblyopia; yet I
"consider it a great result that the atrophy
"has not progressed, and the patient always
"expressed his satisfaction and gratitude to you
"With kindest regards. Yours very truly.
"Nov. 14th 1881." H Knapp"

<u>Stammering and defective articulation</u>,
possibly also dumbness occasionally result
from phimosis. This condition, it is interesting
to observe is almost entirely limited to the

male sex. Females very rarely suffer from it. My friend Mr Clifton of Northampton has given me the details of the two following cases, in which the relation between the sexual and vocal organs is very noticeable. The first is that of a clergyman, about thirty years of age, who had been married over a year. He was of a very nervous irritable temperament, and in a weak state of health. His voice was squeaky, and his speech jerky, spasmodic. In youth he had suffered from seminal losses and these were still continuing never having been able to perform coitus. An examination revealed an elongated, indurated and contracted prepuce. Circumcision was performed; he quickly gained health and strength and his voice and speech were in the course of a year much improved. The other case was a crippled lad aged five and a

half years. The child had the reputation of being only half-witted because he could not talk. There was congenital phimosis. Operation was followed by immediate improvement both in speech and general health.

A third case has quite recently come under my own observation, probably because it was sought for, since I do not think I should have made the necessary examination if my attention had not been specially directed to this connection between stammering and phimosis. He is a boy 4 years of age, who began to talk well but within the last few months has taken to stammering very much. He has been under treatment for whooping cough, and this having left him, his mother wants to know what can be done for his speech. When I directed attention to the penis, she told

me that he had had a quarrel with his sister some time back and had complained that she had pinched him ~~in the penis~~ there. He always had some difficulty and hesitation in beginning a word or sentence, opening his mouth widely for a few seconds before uttering a sound. Words beginning with S, and those requiring the tongue to be applied to the roof the mouth as d, t, seem to give him most trouble. He has a tight phimosis, only the meatus being visible when the prepuce is retracted to its fullest extent. His speech was noticed to have become much worse before the circumcision which I performed on May 28th. The prepuce was much constricted and very firmly adherent to the glans. There was also a considerable amount of dried excretion retained around the corona. My latest report of the case is dated June 14th when there was noted most marked diminution in the stammering, so much

so, that I could not doubt the correctness of the view as to its causation by phimosis.

<u>Diseases of the Bones and Joints</u>. These may also in their early stages be regarded as belonging to the class of neuroses, only here, it is the trophic nerves which are influenced by the reflex irritation, thereby producing morbid changes in the nutrition of the parts. The <u>hip-joint</u> is affected from this cause far more frequently than any other. This would be expected from the close anatomical relation between the parts. Dr Sayre quotes a case where the disease had developed to the third stage with excessive suppuration. Circumcision was followed by complete recovery. The most conclusive evidence on the subject is given by Mr Barwell in his treatise on "Diseases of the Joints". His remarks are so interesting and instructive that I quote them in full: — X'

X' 2nd edition 1881. p. 431.

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"A good many years ago I was struck with the
"fact that nearly all the boys admitted for
"hip-disease into Charing Cross Hospital had con-
"genital phimosis. In a short time this coincidence
"was found to be nearly, if not quite, constant.
"At last in the middle of 1873, I began to note
"in a hundred male cases of hip-disease occurring in
"my private practice or admitted into hospital, the
"presence or absence of this condition; for the
"sake of better classification divided into classes: —

"Condition of prepuce in 100 cases of hip disease
"in boys under ten years of age.

First degree	Second degree	Third degree	Elongation	Normal
39	27	17	11	6

"The same divided into ages

Years	First degree	Second degree	Third degree	Elongation	Normal
2 to 4	3	2	0	1	1
4 to 6	7	5	2	3	3
6 to 8	16	11	9	4	1
8 to 10	13	9	6	3	1

" First degree: the opening in the prepuce a mere pinhole, so that on retraction no part of the glans or only a minute portion of the urethral lips, could be seen. 2nd degree: in which all or a considerable part of, but nothing beyond the urethral orifice could be uncovered. 3rd degree: in which the prepuce, when retracted, uncovered some portion, but only a portion, of the glans. 4th degree: elongated prepuce, projecting more than a quarter of an inch beyond the glans, but capable of entire retraction. 5th degree: normal.

The first line of this table is very significant, when it is considered that the cases are not picked or chosen, but represent every hip-disease in the male that came under my notice from the end of 1873 up to the middle of 1878 when my number was complete. It will be observed that of these cases, 83 have phimosis; that only six have normally-formed prepuce; and that from complete, or the first-degree of phimosis, to which class more than a third of

"the cases belong, the number steadily declines to
"the normal. I would also point out that these
"are not fortuitous coincidences, because, for
"two years at least before commencing tabulation,
"this association was remarked. Furthermore, I
"asked my friend Mr Mervant Baker to enquire
"for me about the prevalence of hip-disease at the
"Evelina Hospital, which is largely used by Jews.
"He tells me that few children are there admitted
"for hip disease, and that most of those so received
"belong, not to the Jewish, but to the Christian com-
"munity.....

"The important fact, however, is simply coincidence
"of pleurisis and hip-disease — a coincidence which
"I should never have dreamed of or imagined have
"not been forced on my observation. Upon the mode in which
"the one influences the other, I would rather not
"speculate further than to point out that pleurisy
"children have facile, frequent and often long-continued
"priapism; that this condition, unnatural in

"the infant, must produce after a time a certain
"irritability or irritation of the lumbar spinal cord;
"that from this part the various nerves of
"the pelvis and lower limbs are given off; that
"the influence of spinal irritation on trophic nerves
"is well known; and that just at this par-
"ticular period large trophic changes are in
"progress about the hip-joint"

Mr Barwell further remarks that hip-joint disease is less frequent in female children than in male, and that in a large proportion of the girls so affected, vulvitis or vaginitis the result of thread worms crawling from the rectum will be found. An irritable or hypertrophied clitoris would I think be more analogous to the condition met with in phimosis, and this condition has been frequently demonstrated as a cause of reflex irritation. Dr Sawyer gives a case of muscular spasm affecting the

legs and causing a spring-halt sort of gait, another of paralytic weakness of the legs, and a third, of idiocy associated with partial paralysis of the legs, in all of which an inflamed and congested clitoris was regarded as the cause. Clitoridectomy or snipping off the end of the clitoris, was followed by very great improvement in these cases, the first being completely cured and the other two greatly relieved. I do not call in question the value of the operation in these cases, but it should be remembered that clitoridectomy is not analogous to circumcision in the male. The clitoris is the representative of the penis and glans, not the prepuce.

Another disease which is regarded by some as having a connection with disorders of the genital organs is angular curvature of the spine. Marjolin asserts that "almost all children affected with Pott's disease give themselves up

X' Johnson. Lancet 1860 Vol I p. 344

to mania with a sort of fury'X' This however is possibly a result rather than a cause; still if such be the case, I think it very probable that there has previously existed some morbid irritation, such as phimosis, which has given rise to the habit, and possibly also to the disease itself. I regret that I have no clinical evidence bearing upon the point.

In regard to the <u>operation of circumcision</u>, which is generally required for the foregoing conditions, many different methods have been proposed and described and instruments invented for its performance. It would be of little use to discuss them all, and I shall only describe that which I believe to be the best. As a rule the removal of a complete ring of foreskin is required, and is followed by the most satisfactory results; but in cases where the prepuce is so

longer than normal a slitting operation is generally sufficient. When the phimosis is not very complete, frequent retraction of the foreskin, together with occasional dilatation with a pair of forceps, will often suffice. Care should be taken in these cases to wash away all excretions, and also to replace the membrane.

When a slitting operation is decided upon, the wound is best made I think on the under surface. A director being inserted within the prepuce is felt for along the side of the frænum. A sharp-pointed curved bistoury is then passed along the director to its extremity, pushed through the skin, and the fold divided at one cut. Care must be taken that the director does not pass into the urethra. This mistake would be easily recognised by the ease with which the director if pushed gently would pass along

the canal. After the prepuce has been divided and all adhesions torn, a fine suture should be inserted through either side of the wound in order to promote rapid healing, and prevent the two sides from uniting. This method has several advantages over a dorsal incision. The wound required is much less extensive. It leaves the glans protected by the prepuce as before, whilst the latter can be quite easily retracted. When the dorsal incision is employed, the prepuce is rarely divided evenly, and one side of it is very apt to be much larger than the other. This gives a very unsightly appearance and tends to reflect discredit upon the operator.

The complete operation of circumcision should always be performed when the patient is under the influence of an anaesthetic. I have done it several times without, and

on almost every occasion have had reason to regret it. The child screams and struggles; it is impossible to hold it perfectly still; the operator has to hurry through his work and cannot do it with any degree of nicety. The insertion of sutures in this prone position while the child is continually moving, and writhing from pain is almost impossible. The friends of the patient moreover, moved by his sufferings regard the operation with horror, and if the result be not very satisfactory, lose confidence in the operator. The patient himself suffers considerably from shock, and if he be more than twelve or eighteen months old is almost certain to bear an antipathy for months afterwards towards the individual who has tortured him, and thus renders any further medical attendance difficult and disagreeable. All this may be entirely avoided by the use

of chloroform, which when administered to children with ordinary care, is I believe absolutely safe.

In reference to instruments a very excellent clamp, which enables the surgeon to operate with the utmost neatness and precision is made by Weiss & Son. A pair of circumcision forceps with a slot running through the blades answers nearly as well. The ordinary dressing forceps are not so satisfactory, since unless the operator is very dexterous an assistant is required to hold them, and the cut made is not so straight and even. Some surgeons dispense altogether with forceps, merely taking hold of the end of the prepuce with the fingers of one hand, and with a bistoury in the other cutting off a piece of it about half an inch long. The result however is not so good as when a clamp is used. The clamp or forceps should be applied

antero-posteriorly, opposite the middle of the glans not directly transverse to the penis but bearing an angle of about 70° to the dorsum. When the blades have been fixed sufficiently firm to prevent the foreskin from slipping, a knife is passed through the slot and the prepuce divided. The clamp is then removed and the blunt pointed blade of a pair of scissors inserted between the glans and the lining membrane of the prepuce which still covers it. A slit should be made directly upwards in the middle line, nearly to the corona. All adhesions are then torn and retained excretions washed away. It is advisable then to cut away with a pair of scissors a slip of the lining membrane which is left on either side of the median incision. This tends to prevent subsequent swelling

and the unsightly hypertrophy of the side of the prepuce which is sometimes left after the operation. One or two sutures of horse-hair or silk or the finest catgut should then be inserted on either side, bringing the remaining lining membrane and the skin together. The circular line of wound will then close by first intention and in about a week the parts will be quite healed. Sutures, I consider indispensable in patients above two or three years of age; and I prefer to use them in all cases even in infants. In three cases, that I know of, when they were not used, one of which occurred in my own practice, the cicatrix contracted, and a second operation was required for a phimosis as complete as that before the first operation. In another case when too much prepuce had been removed, a cicatricial band formed around

the corona, producing a very troublesome paraphimosis.

Haemorrhage is seldom troublesome, but occasionally one or two ligatures are required in the neighbourhood of the frenum. When it proceeds from hyperaemia and inflammation of the parts, the application of pressure by means of the fingers and a piece of lint for a few minutes will generally be sufficient.

An important point to remember in the operation, is the examination of the meatus urinarius, which is sometimes found very narrow, and requires to be enlarged. This is best done by inserting the points of a pair of Sims forceps and then opening them a little. Very little after treatment is required. A strip of oiled lint should be wrapped round the wound and kept soft by pouring a few drops upon it occasionally. The ~~stitches~~

X' Lancet 1875 Vol I p. 73

sutures may be removed after 36 or 48 hours. If redness and inflammatory swelling ensue, water-dressing should be applied to the part and changed very frequently, or the patient may sit in a tepid bath for half an hour at a time twice or thrice a day.

The dangers of the operation when performed by a competent surgeon are almost nil. Dr Mayer reported 600 cases and stated that he had never seen any serious danger.[x] These were performed upon Jewish children on the eighth day after birth. This operation at the present day resembles closely that I have described, the chief points of difference consisting in not slitting up the lining membrane, and the non-insertion of sutures. Formerly and even now in some of the less civilised sections of the community, it could only be stigmatised as a most disgusting procedure.

fatal results are still, I have been informed not at all uncommon, and syphilis and tuberculosis, as I shall shew presently are believed to have been communicated through it. Much historical information is given upon the subject by Mr Ormsby in his Lectures which appeared in the Medical Press and Circular for 1883. Vol. I. Briefly his description of it is as follows. The infant is held by an assistant, and a sort of metal clamp applied, the foreskin being cut off in front of this. The operator then fills his mouth with wine, and bending down, takes the child's penis in his mouth applying suction to the wound. This is said to be an essential part of the operation, the neglect of it being fraught with danger to the child, and also causing the operator to be deprived of his office. Strips of linen are then bound over it.

Special instructions however, with which Mr Ormsby was probably not acquainted, were issued on January 10th 1883 by the Jewish Supreme Council to the Israelitish communities. Only persons specially authorised by the Council were to perform the operation. The strictest cleanliness was enjoined and the use of 5 per cent. solution of carbolic acid to the hands of the operator. No sucking of the wound was allowed, nor irrigation with wine. It was to be dressed with 10 per cent. boracic lint. Other necessary precautions, such as the freedom of the operator from previous contact with infectious disease, and directions for arresting haemorrhage and preventing other accidents were also issued. Before these regulations were made, deaths were frequently recorded, and these I think represented only a small percentage

X' British Foreign, Medico-Chirurgical Review
1864 vol I p. 487.

X² Rankings Abstracts 1858 vol II p. 22

of those that actually occurred.
Dr Sedgwick mentions seven cases where the patients were subjects of the haemorrhagic diathesis, and who succumbed after the operation from haemorrhage.[X1] Dr McKenzie of Glasgow quotes two deaths occurring in one family. A third child was born, and the parents dreading a similar result from the operation, secured the services of a medical man. Severe haemorrhage set in when the child was put to bed after operation, and would in all probability have proved fatal had not proper treatment been adopted. In such cases as these, when haemorrhage occurs, Dr McKenzie believes it to be the result of abnormal distribution of the blood-vessels of the prepuce.[X2] Dr Kohn at a meeting of the Medical Society of Vienna stated that he had lost his own child from the

X' Lancet 1874 Vol II p. 823

X² Lancet 1870 Vol II p. 471

X³ Lancet 1882 Vol I p. 308

X1

operation and knew of six other deaths due to it. Dr Schwarz publishes the cases of two boys who died, one five days after circumcision, and the other twenty-five days after, both of phlegmonous inflammation and sloughing of the part. In each case the operation was performed on the eighth day after birth.[X2] In ordinary surgical practice, I am only acquainted with one death resulting from it. This is reported by Mr Gallard.[X3] Septicaemia I should imagine was the cause. The patient aged 17 years had gonorrhoea, soft sores, and double inguinal bubos. His general health was good. He went on satisfactorily till four days after the operation, his temperature not exceeding 98.5°, but then it rose to 105.4°, and he died two days after. His death was attributed to the operation, but I think the possibility of

X' Lancet 1885 vol II p. 508

an acute general infection from the discharging urethra or sores should not be lost sight of.

The following cases where tuberculosis and syphilis appear to have been communicated by circumcision would lead us to suspect that the decrees of the Jewish Council have been sadly neglected. These it will be noticed have all been recorded within the last three or four years.

Tuberculosis. Dr Hermann Weber X' gives two cases of phthisis, communicated by an operator who was in the last stage of consumption, and who sucked the wound according to the old Jewish rite. Ulcers apparently tubercular formed on the prepuce and the inguinal glands enlarged. One child recovered after some months. The other had abscesses, and died three years afterwards from Pott's disease and

X London Medical Record March 1888 p. 125

rapid phthisis.

Another case recorded by Mr Eve[X'] is that of a Jewish child aged five months "admitted "into the London Hospital on Aug. 23rd, 1887, "with a large, red, globular, fluctuating "swelling in each groin. On the under "surface of the penis at the side of "the frænum was a small superficial "sore. The abscesses were opened and "pus containing masses of caseous material "came away. The walls of the abscesses "were then scraped. In fourteen days "the child left the Hospital with a "sinus in each groin discharging a small "amount of pus". The insertion of some of the caseous material beneath the skin of a guinea pig produced general tuberculosis in the animal. In this case circumcision had been performed on the eighth day, and the swellings in the

groin, had been first noticed six weeks afterwards. It was then found that the circumcision wound had either not healed, or broken out again. "On "Nov. 22nd the child shewed no evidence of "tuberculosis; there was a pin-hole opening "in the left groin, but the right had healed "soundly. The circumciser had died the previous "week from consumption. He had not applied his "lips to the wound, but had ejected some wine "from his mouth over it. The child in January "1888 appeared quite well. The parents were both "healthy. Living in the same house was another "woman, whose child had been circumcised by the "same person in 1886, and abscesses had formed "in the groins, six or seven weeks afterwards in "this case also. The child is now well and "strong"

It cannot be said, I think that Mr Lees' case is very conclusive as to the communication

X' British Medical Journal 1886 vol I p. 86

of tuberculosis. There certainly does not appear to have been any general infection of the system. It appears to have consisted rather in local lesions, resulting from some neglect or unhealthy irritation proceeding from the wound. The fact of the caseous material producing tuberculosis in the guinea pig, also does not prove much, as almost any foreign body, such as a simple seton, inserted under the skin in these animals will produce this disease. The rapid (fourteen days in hospital) and apparently permanent recovery, is also contrary to the usual progress of tubercular disease. Syphilis has been communicated to infants by the operation under the Jewish rite as the following cases will testify. A group of six children is mentioned by Mr Jonathan Hutchinson[x'] each of whom had constitutional syphilis transmitted through

X London Medical Record 1885 March p. 109.

circumcision. Chancres formed in all and two had double suppurating bubos. Dr Kedeloff[X] reports three cases in which syphilis was believed to have been communicated by suction of the circumcision wound.

Before concluding this thesis, I wish to allude briefly to the advantages which are claimed for the operation of circumcision by Jewish surgeons and others. I have already referred to the greater immunity from hip-joint disease, which Jewish children have been supposed to possess; and the same remarks will doubtless also apply to the other diseases which have been shown to result from phimosis. In addition to these there are a few minor conditions which have not been mentioned. The habit of masturbation

X' Fowler — Lancet — 1860 Vol. I p. 382

Levitt — Lancet 1874 Vol II p. 856.

Mayer — Lancet 1875 p. 73

is said by many surgeons X' to be much diminished by the practice of circumcision and these can I think be little doubt of this. For whenever we find an elongated and contracted prepuce causing much irritation, the attention of the patient is sure to be frequently directed to it, and such genital excitement as will ensue, will strongly predispose him to the habit. The operation of circumcision will of course remove this cause and thereby assist materially in the cure. Dr Mayer states that he has twice cured lads aged 12 and 13 years, of masturbation by circumcision. The operation probably acts in these cases in a threefold manner; first, by removing irritation; secondly, by causing a wound which so long as it is fresh, renders masturbation painful or impossible; and thirdly, by

X' Medical Times & Gazette 1855 Vol II p. 492

leaving the glans penis is less bare, and thereby reducing somewhat its sensibility.

Syphilis is believed by some to be much less common among the Jews than among the uncircumcised. The only statistics, bearing upon the question, that I am acquainted with, are those of Mr J. Hutchinson, who shewed that at the Metropolitan Free Hospital, situated in the Jews quarter in London, in 1854, the proportion of Jews to Christians, among the outpatients was as 1 to 3, and at the same time the proportion of cases of syphilis was as 1 to 15. This was moreover not the result of a less degree of immorality among the Jews, since nearly one half of the cases of gonorrhoea occurred in patients of this persuasion. X'

The greater immunity of Jews from the various disorders, which have been mentioned in this thesis as consequent upon phimosis, is not however so real as might appear at first sight. The reason of this is to be sought in the fact that in the operation according to the Jewish ceremonial, no regard is had to the adhesions between the prepuce and the glans, and these are even a more fruitful cause of disease than mere contraction. Adherent prepuce is however I believe less common among Jewish children than among Gentiles, and this is probably, because the operation is done in early infancy before adhesions have formed; or if adhesions are already present, the shortened foreskin, by moving more readily backwards and forwards, will tend to break them up. During

the last three or four years, I can only recollect one child circumcised according to the Jewish rite, suffering afterwards from adhesions. I have probably moreover, seen in proportion, more cases of phimosis than the generality of practitioners, since my attention being directed to the subject, many of my cases were specially sought for.

The conclusion I have arrived at is, that phimosis is a much more common cause of illness, than is generally supposed, that indeed something like 7 or 8 per cent. of all male children suffer more or less from it. The universal practice of circumcision as it prevails among the Jews, is, I need hardly say, quite unnecessary and inadvisable from a physiological point of view. The operation, indeed,

would be very much less frequently required than it is, if the necessary attention were paid to the child, by the nurse, in early infancy. It too often happens however, that either from neglect, or a false sense of delicacy, a morbid condition of the parts is allowed to be set up, from which then arise the most varied and manifold disorders, of which, I am afraid, I have given but a few illustrations.