

vious small-pox and previous successful vaccination, less than 1 per cent. of the remainder resisted revaccination.

Altogether, during this experience I vaccinated over five thousand persons, practically all of whom I saw subsequently. Only rarely was a protective dressing used over the vaccination site, for I had neither sufficient time nor materials for dressings during most of this intense work. Yet even amid the reeking filth of Mexican home life there were complications following vaccination in but eighteen cases. In thirteen of these, deep ulcers developed at the site of inoculation; a baby scratched the pustule and received multiple inoculations; there were three cases of deep abscess formation and one Indian child died of tetanus following the attempts of its mother to rid the arm of vaccine by plastering it with foul mud of the village street.

This experience is remarkable because it offers so exact and specific an example of the value of vaccination, unaided by any other means, in limiting a fairly virulent epidemic of small-pox. Between the time of the onset of the disease in the pueblo and the finish of the vaccination approximately 15 per cent. of the original population must have been affected. Considering the rapid progress which the epidemic was making, as shown by the number of cases already in the incubation stage at the time of vaccination, it is reasonable to assume that practically the entire unvaccinated part of the population would have contracted the contagion eventually, just as occurred in all the adjacent pueblos. Yet within two weeks this epidemic, which had already reached alarming proportions and threatened to become most formidable, was absolutely and permanently eliminated.

1030 I. N. Van Nuys Building.

UNIVERSAL CIRCUMCISION AS A SANITARY MEASURE

ABRAHAM L. WOLBARST, M.D.
NEW YORK

Of late there has been noticeable a decided tendency on the part of some medical men, mostly pediatricians, to condemn the ancient practice of ritual circumcision. This tendency is amply demonstrated in the statement of the late Professor Maas, and apparently approved by Dr. L. Emmett Holt,¹ that "it is the duty of the physician to raise his protest against the performance of ritualistic circumcision in every case."

When we examine into the reasons underlying this remarkable dictum of Maas, we find that the opposition is based on the possibility of infections being carried to the infant by careless or ignorant operators, to whom the rite of circumcision is sometimes entrusted.

Holt¹ states that after a search through medical literature with the assistance of Drs. Alan Brown and Stafford McLean, he was able to find references or reports of forty cases of circumcision tuberculosis in addition to the case he himself cites. It must therefore be apparent when we consider the millions of Jewish and non-Jewish children who have been subjected to this ritual operation, without untoward incident, that the number of infections with tuberculosis must be rare indeed. The same is true of syphilis, the second disease which is occasionally transmitted through circumcision.

When, however, the opponents condemn the practice of circumcision, *in toto*, because of the possibility of

these infections, it seems necessary to point to the other side of the picture; it is, therefore, the purpose of this paper to demonstrate that circumcision, far from being the menace that some of these observers would have us believe, is, on the contrary, a most beneficent practice from the sanitary aspect, and that it should be encouraged in every possible case, whether it be done as a ritual act or as a purely sanitary measure.

It is not my purpose to condone or even seek pardon for the acts of those who, in the performance of ritual circumcision, have spread infection of any kind whatever. These men should be regarded as unfit to practice this act, and should be debarred from performing it. The Jewish Community (Kehillah), representing nearly a million Jewish residents of the city of New York, having been made aware of the occasional infections we are discussing, is even at this moment taking steps to prevent their further occurrence by seeking to place the practice of ritual circumcision on a thoroughly modern basis. It is hoped to accomplish the desired end by the formation of a board of physicians, consisting of well-known physicians and surgeons, who will instruct the "Mohelim"² in surgical technic, particularly the principles of asepsis, hemostasis and general hygiene. In this way, only those who have satisfied the board of physicians of their knowledge and practice of the rules of asepsis will receive the moral sanction of the Jewish Community to perform the ritual, and thus the unfit or ignorant will be weeded out.

In fact, the Mohelim themselves have asked for such supervision and instruction. Rev. Dr. J. L. Magnes,³ president of the Kehillah (Jewish Community), says:

The Kehillah was approached by the Society of Mohelim for the purpose of organizing a board of recognized physicians and surgeons to whose authority in hygienic and medical matters the Mohelim were to submit. The plans of the Society of Mohelim include the formation of classes for instruction in hygiene and allied subjects, to the end that a certificate may be issued by the board of physicians and surgeons to such Mohelim as satisfy all requirements. A list of certified Mohelim in the office of the Kehillah placed at the disposal of the community would doubtless surround the rite of circumcision with all necessary safeguards.

It is, therefore, apparent that the men who perform the rite are themselves anxious to avoid any untoward accidents in the performance of this little operation, and are willing to cooperate in weeding out those who are either diseased or ignorant of the primary surgical rules of asepsis. It should be remembered that these men are remarkably skilful, as a rule, in the performance of circumcision, and I venture the opinion that their skill and dexterity in operating on infants are by far greater than that of any surgeon. This is due to their extensive experience and to the fact that they are trained to do nothing else. If, therefore, a few of them perform their duties in disregard of modern principles of asepsis, the criticism should be leveled at them, as individuals, and not at circumcision *per se*. One might just as rationally denounce the operation of laparotomy and protest against its performance, just because towels, artery clamps and other foreign bodies have been left in the abdominal cavity by careless surgeons.

The infections with syphilis and tuberculosis, when they do occur, are caused by these few Mohelim who

2. "Mohelim" is the plural of "Mohel," by whom the rite is performed.

3. Magnes, J. L.: Fourth Annual Report of the Kehillah (Jewish Community), April, 1913.

1. Holt, L. Emmett: Tuberculosis Acquired through Ritual Circumcision, THE JOURNAL A. M. A., July 12, 1913, p. 99.

still adhere to the ancient practice of stopping the bleeding by sucking the edges of the wound. But this practice is merely a relic of ancient times, and most of the modern operators never do it. I am informed by several rabbis and Mohelim that neither the ritual nor the rabbinical law demands that the wound shall be sucked, if another method of hemostasis can be safely employed. In this connection, Rabbi H. Pereira Mendes⁴ of New York writes:

Less than a single century ago, hemostasis by hot oil or hot pitch was countenanced by accepted surgery. It required time to bring about changes to modern methods. Much less time will be required to improve the methods complained of in "ritualistic" circumcision, particularly when we remember not only that many Jewish operators in America use modern methods of asepsis, and that in such countries as England, France, Germany and Scandinavia they may not otherwise practice, but also that the Jewish religious law insists on every precaution in matters of health and demands that when "Sekanah" or "danger" to health is critically involved, any religious custom and any duty not may, but must, be overridden.

I have the assurance of Rabbi Philip Jaches of New York, who has successfully performed more than seven thousand ritual circumcisions, that the ancient practice of sucking the wound is considered obsolete, and that cotton and gauze, wet with antiseptic solutions, are being commonly used for hemostasis.

In view of these facts, I feel justified in saying that the rite of ritualistic circumcision should not be condemned, but rather those who perform it in contravention to the modern rules of asepsis and the spirit of the Jewish law. That these faulty operators are few and gradually disappearing must be evident by the generally increasing demand on the part of parents for modern surgical methods in the performance of the rite.

At present, however, I am principally concerned with the operation of circumcision as a necessary sanitary measure. Not only am I heartily opposed to any curtailment of the practice of ritual circumcision, but I also advocate its universal employment in all male children, whether Jewish or Gentile, from a purely sanitary and health-giving point of view.

My attention was first attracted to this subject some years ago, when I saw the striking difference in the amount of local venereal ulcers treated at the Good Samaritan Dispensary and the Beth Israel Hospital, at which the patients are almost entirely Jewish, as compared with the vastly larger proportion which I saw while working with Chetwood at the Polyclinic Hospital and in my own service at the West Side German Dispensary, at which nearly all the patients are non-Jewish. Not only was the proportion of syphilis and chaneroid much less among circumcised patients, but also the general cleanliness of the parts and the absence of serious local complications due to the presence of a foreskin, made a lasting impression on my mind, with the result that universal circumcision is, in my opinion, an absolute necessity, when we consider the general welfare of the race. Specifically, my reasons for advocating universal circumcision are as follows:

1. It is a great aid to cleanliness of the genitals.
2. It is a decided prophylactic against infection with syphilis and chaneroid.
3. It prevents in great measure the development of venereal warts, herpes, epithelioma and other growths.

4. Mendes, H. Pereira: Correspondence, *THE JOURNAL A. M. A.*, Sept. 6, 1913, p. 786.

4. It offers a diminished tendency to masturbation, nocturnal pollutions, convulsions and other nervous results of local irritation.

5. It diminishes local complications in the presence of venereal diseases.

6. It makes the "fourth venereal disease" impossible.

7. It prevents the development of phimosis and paraphimosis, with their attendant complications.

Let us consider these items at greater length:

I. AN AID TO GENITAL CLEANLINESS

Surely, any one who has worked in a male clinic must have observed that very few of the uncircumcised, at least among the poor and middle class, pay proper attention to the cleansing of their genitals. Times innumerable, in my experience, the stench arising from the confined and retained balanic secretions has been almost unbearable, even in the absence of any particular disease. Add to this the increased element of inflammation in balanitis associated with any one of the venereal diseases, and the argument for circumcision as a measure of hygiene must be apparent to any but a man deprived of his olfactory sense. Not infrequently adhesions form between the glans and the prepuce; in these cases, retraction is next to impossible and there is a constant accumulation of the secretions, with all that the term conveys. I have encountered hundreds of men who have seldom or never retracted the foreskin for cleansing purposes.

II. AS A PROPHYLACTIC AGAINST SYPHILIS AND CHANCROID

I am a firm believer that men who have been circumcised are less prone to infection with these diseases because of that fact. It is not necessary to go into a discussion of the obvious reasons for this view; suffice it to say that this view is also held by most authorities on venereal infections, as I shall show below. For further substantiation of this belief, I have searched my private records, with more than striking result. The records of 800 patients treated in my office were studied; of these, 400 were circumcised and 400 uncircumcised. In order to determine whether or not the Jewish (circumcised) patients suffered equally with their Christian (uncircumcised) neighbors from syphilis and chaneroid (gonorrhea not being considered). I found the interesting data given in the accompanying tabulation.

SYPHILIS AND CHANCROID IN THE CIRCUMCISED AND UNCIRCUMCISED

CIRCUMCISED PATIENTS			
Disease	Cases	Per Cent.	
Gonorrhea	321	78	
Syphilis and chaneroid	79	22	
Total	400		
UNCIRCUMCISED PATIENTS			
Disease	Cases	Per Cent.	
Gonorrhea	238	59	
Syphilis and chaneroid	162	41	
Total	400		

It will thus appear that of 400 circumcised patients, 78 per cent. sought treatment for gonorrhea and 22 per cent. for syphilis and chaneroid; whereas of the same number of uncircumcised patients, 59 per cent. sought treatment for gonorrhea and 41 per cent. for syphilis and chaneroid. The difference must be strikingly convincing. Many years ago Hutchinson observed in the Jews' quarter of London that the proportion of Jews to Christians among the out-patients was as one to three; at the same time, the proportion of cases of syphilis in

the former to the latter was one to fifteen.[†] It has also been pointed out by Hutchinson, Fournier, Clerc and other authorities⁵ that the foreskin is the favorite site for about 75 per cent. of primary chancres. These data show conclusively that there is far more syphilis among the uncircumcised than among those who have been circumcised. Nevertheless, it may be charged that figures can be distorted to prove almost any contention. In order, therefore, to forestall this possible criticism of the data just quoted, I have fortunately been able to secure the opinion of professional colleagues in various parts of the country, whose experience in the treatment of diseases peculiar to men has enabled them to determine whether or not their uncircumcised patients were more often infected with syphilis and chancreoid than those who had been circumcised. In response to my inquiry, these gentlemen kindly wrote as follows:

L. DUNCAN BULKLEY, New York: I have observed a very much larger proportion of syphilis and chancreoid among the uncircumcised than in those who have been circumcised.

E. G. BALLENGER, Atlanta, Ga.: I regret that I have not statistics which bear directly on this point. The tender, often macerated, condition of the quassimucous membrane of the glans penis and foreskin, especially in the region of the frenum, undoubtedly affords a more favorable site at which organisms may gain entrance than does the hardened skin of the circumcised. The abrasions and so-called "hair-cuts" are also more likely to occur in the uncircumcised than in the circumcised. More than 75 per cent. of cancers of the penis are observed when phimosis exists in the uncircumcised. Masturbation appears to be less prevalent in the circumcised.

F. BIERHOFF, New York: I would say that although I have not kept any statistics with reference to the relative frequency of syphilis and chancreoid among the circumcised and the uncircumcised, I am positive that both of these diseases are more frequently encountered among the latter class. This is particularly true of chancreoid.

CHARLES H. CHETWOOD, New York: Highly in favor of the operation of circumcision as a sanitary measure.

HUGH CABOT, Boston, Mass.: I have no doubt that these infections are less common in proportion to exposure in the circumcised than in the uncircumcised.

B. C. CORBUS, Chicago: You know as well as I do, that for hygienic measures, circumcision should always be advised. In regard to the occurrence of infection in those that are not circumcised as compared with those that are, I am truly unable to draw any definite conclusions. The "fourth disease" is absolutely one infection that cannot exist on an individual who has been properly circumcised. As the infecting organism is anaerobic it must require a closed foreskin for the growth of the organisms.

B. ERDMAN, Indianapolis: There is a question in my own mind as to the question of circumcision preventing, so to speak, gonorrhea and chancreoid. I don't believe the uncircumcised suffer more from these infections than the circumcised, but in syphilis the matter is entirely different. I want to say that in the last thirty-three cases of syphilis, recent infections, having seen the sore from three to eighteen days after appearance (no extragenital lesions considered), twenty-seven were in uncircumcised patients and six were in circumcised (four were Jews). There is no doubt in my mind but that circumcision and plenty of soap and water are valuable in the prevention of lues.

GEORGE HENRY FOX, New York: Many years ago I noticed in my clinics that circumcised patients rarely appeared with local venereal diseases. I still have the impression that the prepuce, in a certain class of patients, predisposes to infection with chancre and chancreoid, although I have no data to offer on which a ratio of immunity could be based.

EUGENE FULLER, New York: I think very favorably of circumcision as a sanitary and prophylactic measure. I think there is more syphilis and chancreoid among the uncircumcised. I cannot state offhand the proportion. The preputial orifice and the mucous surface of the parts removed in all instances of properly performed circumcision are the prevailing seat of venereal sores among the uncircumcised. Abrasions during coitus, without which chancre and chancreoid cannot result, occur much less frequently in connection with those properly circumcised than in connection with those who are not. Then again, circumcision removes all danger of balanitis. All persons afflicted with balanitis in a severe or chronic grade present a raw surface at all times. Consequently such men can hardly escape being inoculated with a venereal sore in sexual contact with an infected woman.

M. L. HEIDINGSFELD, Cincinnati: I believe that the uncircumcised is more susceptible to the initial lesion of syphilis and chancreoid infection for the following reasons: Abrasions and macerations, the open door to infection, are more common in the latter for mechanical reasons and lack of cleanliness. Again, I consider the normal unbroken skin the surest protection to exposed infection. Although syphilis and soft chancre infection is by no means of rare occurrence in my circumcised clientele, and possibly equally large, for personal reasons, with that of the uncircumcised, it is evident to me that the circumcised temperamentally are more given to lascivious vice and expose themselves to a greater degree than the uncircumcised.

F. J. LEVISEUR, New York: Looking back over a large experience of many years, I may state as my belief that the Judaeus Apella is less frequently affected with chancreoid. It is not so, however, with syphilis. I believe that the latter occurs fully as often in those who have been circumcised as in those who have not, if not oftener.

H. H. MORTON, Brooklyn: I am thoroughly in favor of circumcision as a hygienic measure and also as a prophylactic against infection with venereal disease, particularly chancreoid and chancre. I have also noted that in the great number of amputations of the penis which I have done for epithelioma of the glans, the patients, with but one exception, always had long foreskins.

E. WOOD RUGGLES, Rochester, N. Y.: Since engaging in private practice here fifteen years ago, I have observed a much smaller proportion of chancres among Hebrew patients, who constitute a rather large part of my clientele, than among Gentiles. As to a definite ratio, I cannot state positively, but should say that, roughly speaking, not over a fourth as many cases of penile chancres and chancreoids occurred among the circumcised. There can be no doubt that the cleanliness, the freedom from balanitis and herpes and the toughened condition of the skin caused by constant friction against the clothing, produces a very decided protection against these diseases.

G. K. SWINBURNE, New York: When I first took my clinic at the Good Samaritan Dispensary in 1889, I had been working in several other clinics. I had also spent six months in Vienna in the clinics there. After I had been working for some time at Essex Street, I noticed that in proportion to the amount of gonorrhea I was treating, I was not getting anything like the proportionate amount of chancreoid and syphilis that I saw at Chambers Street, or the Vanderbilt or Presbyterian clinics. This was very noticeable, and I believed it to be due to the fact that the vast majority of my Essex Street patients had been circumcised. Since 1889 I have not had occasion to change my views. I should not wish, however, to attempt to state proportions in figures; suffice it to say that the difference was very striking.

H. J. F. WALLHAUSER, Newark, N. J.: By far the greater number of initial lesions that have come under my observation were located in the prepuce. I have also several times traced an infection to a preexisting herpes preputialis, and very frequently patients have informed me that an abrasion occurred during coitus which healed rapidly and was followed by the appearance of the initial lesion on the site of the injury. Deducing that the uncircumcised are more susceptible to superficial injuries on account of a mild form of inflamma-

[†] Remondino, P. C.: *History of Circumcision*. Philadelphia, F. A. Davis Company, p. 192.

⁵ Alexander: *Die Hygienische Bedeutung der Beschneidung*. Breslau, 1902.

tion which is nearly always present, especially in men in whom the glans is completely covered, there can be very little doubt as to the greater liability to infection in this class of individuals.

M. W. WARE, New York: I am wholly unbiased in my opinion when I say that circumcision is absolutely no safeguard against any of the venereal diseases that human flesh is heir to and which exist in equally as large a number among the circumcised as those not circumcised. Thus I have seen in twenty years of dispensary and hospital practice a surprisingly large amount of syphilis in its late manifestations (tertiary) among the parent stock of the emigrant Russian Jew, as well as recently acquired syphilis in the sons of the next generation. Perhaps the chancroidal infections are not quite so common, and though your inquiry did not cover gonorrhea, I venture the opinion that the organism of Neisser does not discriminate between the urethras of circumcised or uncircumcised penes. The following personal experience may interest you: Recently the son of orthodox Jews, a graduate of Harvard, whose son I was about to circumcise, told me that he was having the ritual done surgically at least, to appease the irate grandfather (paternal), but forthwith he proceeded to rouse the ire of said grandparent by telling him that circumcision was a relic of barbarism in so far as it signified a sacrifice on the altar of God which called for an offering of lamb's blood, but for which the blood of the new-born male on the tenth day was substituted by the performance of the circumcision. I could cite many more reasons which speak against circumcision from any point of view. In conclusion, I would be quoted as characterizing circumcision as a fetish surviving from ancient times.

To these views may be added the opinion expressed by G. Frank Lydston,⁶ Chicago:

Circumcision is a most commendable practice. Whatever religious views one may hold, it must be conceded that Moses or whoever devised the operation was a hygienist of no mean pretensions. The Jews are social hygienists in many ways, some of which might well be imitated by the Gentiles, but none of their religious customs is quite so sensible as the rite of circumcision. Circumcision promotes cleanliness, prevents disease, and by reducing oversensitiveness of the parts tends to relieve sexual irritability, thus correcting any tendency which may exist to improper manipulations of the genital organs and the consequent acquirement of evil sexual habits, such as masturbation.

I may likewise add the opinion of E. M. Corner,⁷ the well-known English surgeon, who is a firm believer in the value of circumcision, as is evidenced by these words:

For choice, it (circumcision) is an operation which should be done in early babyhood. Then the operation is borne well, giving the minimum of discomfort, no anesthesia is required, and usually no stitches. Up to 6 months of age, a healthy baby is very easily nursed, as it leads, more or less, the life of a vegetable: feeding and sleeping. On the other hand, there is no doubt that many cases of apparent phimosis in babies get well from the natural stretching of the prepuce by erections. In spite of this, I would strongly urge that this little operation, when advisable, is recommended at this age on sanitary and moral grounds; all hypothetical arguments being avoided. . . . Whenever possible, it should be done as early as the child's condition permits.

A careful perusal of the views herein expressed must be convincing, to say the least, of the great value of circumcision as a sanitary measure. Detailed comment on the individual views seems altogether unnecessary. It may be pointed out, however, that there is a practical unanimity on the part of those who have kindly

expressed their opinions as regards this question. The one dissenting voice is that of Dr. M. W. Ware, and with all the deference due to my one-time preceptor, I cannot but feel that his opposition to circumcision is based on other than scientific grounds. Even assuming for the moment that his Harvard friend is correct in his weird statement that circumcision was regarded as a substitute for the "sacrifice on the altar of God" (which is not true), I cannot see how that has any bearing on the present-day value of circumcision as a sanitary measure. To close our eyes to the utility of this little operation because it is a relic of ancient times brings to mind the similarly ancient custom of biting one's tongue to spite the nose. If there is any objection to circumcision, it should be based on valid, scientific grounds, and it is to be regretted that so capable an observer as Dr. Ware has not offered any objection more convincing than that "it is a fetish surviving from ancient times."

It must be apparent, however, that the vast preponderance of modern scientific opinion on the subject is strongly in favor of circumcision as a sanitary measure and as a prophylactic against infection with venereal disease. Whatever objections have been raised owing to the improper performance of the operation should not militate against circumcision *per se*, but against those persons who fail to do it properly.

III. AS A PROPHYLACTIC AGAINST VENEREAL WARTS.

HERPES AND EPITHELIOMA

There can be no question that the development of venereal warts and herpes is favored by the presence of a foreskin and a chronic balanitis. The instances in which they are seen in a circumcised patient are rare indeed. They are usually found just behind the corona, in conjunction with a more or less irritated foreskin.

The late Jonathan Hutchinson stated as his belief that phimosis and balanitis lead to cancer of the penis. This view is likewise held by innumerable observers who have had the opportunity of studying the relationship between the chronic inflammatory condition existing in the presence of balanitis and the development of this form of cancer. All writers agree that penile cancer in the circumcised is exceedingly rare. I need but recall the remark of Dr. H. H. Morton, previously quoted, to the effect that all but one of the patients in whom he amputated the penis for cancer were blessed with long foreskins. Chetwood, in his latest work,⁸ states that the percentage of cancer of the penis "in those of the Hebraic race is strikingly small." One need not stretch the imagination too far, to realize that the constant friction and irritation occasioned by the presence of a foreskin, particularly a tight and long one, may act as an exciting cause of cancer in men predisposed to this disease. Especially is this true of the ignorant and poorer classes, who are not overclean, and who, apparently, are not instructed in their youth by their parents or guardians as to the necessity for an occasional cleansing of the preputial cavity. Barney,⁹ basing his observations on a study of one hundred unselected cases of penile epithelioma, concluded that phimosis is pre-eminently the most important of its exciting causes, occurring in over 85 per cent. of cases. It is worthy of note in this connection that there was not a single Hebrew among the hundred patients, a fact which an editorial writer¹⁰ considers a "most convincing argument

6. Lydston, G. Frank: Sex Hygiene for the Male. Chicago, Riverton Press, 1912.

7. Corner, E. M.: Male Diseases in General Practice, London, Oxford University Press, 1910.

8. Chetwood, C. H.: The Practice of Urology, New York, William Wood & Co., 1913.

9. Barney: Ann. Surg., December, 1907.

10. Med. Rec., New York, Feb. 15, 1908.

in favor of circumcision in an adult whose prepuce cannot be easily and completely retracted." Surely if circumcision is indicated at all, the time to perform it seems to be before the child becomes an adult and runs the risk of cancer.

For the further information of those who regard circumcision as a relic of barbarism without any redeeming value, it is interesting to note that Bashford¹¹ says:

Similar conclusions have been arrived at by a consideration of cancer of the penis, which is extremely frequent in some races, and very rare in others living side by side with them. The frequency of cancer of the penis is apparently associated with chronic irritation due to the accumulation of dirt and secretion under the prepuce, whereas it is practically unknown in Mohammedan races who practice circumcision.

IV. AS A PROPHYLACTIC AGAINST MASTURBATION

It is a well-known fact that the foreskin is a frequent factor in the causation of masturbation, not alone in children, but in adults as well. This has been amply proved by the fact that circumcision has become recognized as a most effective remedy in these cases. The glans in the uncircumcised is highly sensitive, and this, combined with the constant friction of the prepuce and the accumulation of the secretions, brings on a condition of irritation which is often relieved only by manipulation and scratching, with the result that masturbation becomes more or less of a habit.

A repetition of a paragraph from Lydston (already quoted) may be pardoned in this connection. He says:

Circumcision promotes cleanliness, prevents disease, and by reducing oversensitiveness of the parts tends to relieve sexual irritability, thus correcting any tendency which may exist to improper manipulations of the genital organs and the consequent acquirement of evil sexual habits, such as masturbation.

Furthermore, it is generally accepted that irritation derived from a tight prepuce may be followed by nervous phenomena, among these being convulsions and outbreaks resembling epilepsy. It is therefore not at all improbable that in many infants who die in convulsions the real cause of death is a long or tight prepuce. In a case reported by A. H. Baker¹² of Elmira, N. Y., repeated attacks of epileptiform convulsions occurred in a boy aged 5. It was found that there was an adherent prepuce with marked adhesions. After the child was circumcised the convulsions ceased and have not since recurred.

A similar case is reported by Gowers,¹³ the famous neurologist, as follows:

A boy aged 13 had suffered from fits for fifteen months, which commenced with a sudden start of considerable violence, and immediately his legs became strongly flexed, and his trunk bent forward with the head between the knees. He had twelve or fourteen fits a day on various treatments. It was then found that he practiced masturbation; a blister on the prepuce reduced the fits from two to seven daily. He was then circumcised, and the attacks ceased at once, and did not recur.

Gowers also adds,¹³ in discussing the treatment of epilepsy:

Circumcision, if effectually performed, is usually successful, and should be adopted in all cases in which there is reason to associate the disease with masturbation.

11. Bashford: Third Scientific Report of the Imperial Cancer Commission, quoted by E. M. Corner (Footnote 7).

12. Baker, A. H.: *Med. Era*, January, 1910.

13. Gowers, W. R.: *Epilepsy and Other Convulsive Diseases*, Philadelphia, P. Blakiston, Son & Co.

We have the further testimony of Moll,¹⁵ who confirms the general opinion that phimosis induces to masturbation. To quote:

We have further to take steps to allay as far as possible all kinds of local irritation of the genital organs. Among these may be mentioned phimosis and skin eruptions of the genital region, which latter may lead to scratching, and so give rise to masturbation, even apart from the fact that the itching itself may favor the occurrence of voluptuous sensations.

With these authoritative observations in mind, we may safely conclude that circumcision is to be regarded as a powerful prophylactic against masturbation and other reflex neuroses that result from preputial irritation.

V. AS A PROPHYLACTIC AGAINST LOCAL COMPLICATIONS IN VENEREAL DISEASE

Surely it is not necessary to offer more than the mere statement of fact, to convince an unprejudiced mind that circumcision prevents local complications in the presence of venereal disease. The experience of any one who has treated venereal diseases in a large clinic which is patronized by uncircumcised men of the lower and poorer class is sufficient for the purpose. Balanitis, with its accumulation of natural and pathologic secretions within the cavity of the prepuce, is a complication of such common occurrence as to be expected in every uncircumcised patient. Worse than that, when the prepuce is somewhat longer and tighter than usual, chancres and chancreoids may and often do remain long undiscovered, hidden in a mass of unspeakably foul and necrotic matter. Inflammation of the adjoining glands is the natural sequence of the retention and absorption of these unclean secretions. In this connection it is well to remember that there must be cases innumerable, in which syphilitic and chancreoid infection has been spread unwittingly in coitus, as the result of these venereal ulcers, hidden in the preputial cavity. Not infrequently, too, the retention and inflammation become so acute as to produce extensive ulceration and necrosis of the glans and the foreskin itself. Altogether, the picture is a striking and compelling argument in favor of the circumcision of all males, irrespective of whether the foreskin might in adult life be long or short, tight or loose.

VI. AS A PROPHYLACTIC AGAINST BALANITIS

It naturally follows, as Dr. Corbus has mentioned in his statement, quoted before, that in the absence of a foreskin, this form of preputial inflammation is impossible. This condition was first described by Bataille and Berdal,¹⁶ and later confirmed by Scherber and Müller.¹⁷ The etiologic factors are a tight foreskin, which excludes the air, joined with a symbiosis of an anaerobic vibrio and a spirochete. Corbus and Harris,¹⁸ in an extensive study of this disease, remark that this condition may cause deep and wide-spread gangrene, and that "as a prophylactic measure the practice of circumcision should be encouraged; it is absolutely impossible for balanitis to exist in an individual who has been circumcised." To those who condemn circumcision, a brief experience in a clinic located in a neighborhood in which the uncircumcised live and come for treatment must be suffi-

15. Moll, Albert: *The Sexual Life of the Child*, New York, the Macmillan Company, 1912, p. 307.

16. Bataille and Berdal: *La balano-posthite erosive circonée*, *Méd. mod.*, 1891, ii, 340.

17. Scherber and Müller: *Arch. f. Dermat. u. Syph.*, 1905, lxxvii, 77.

18. Corbus, B. C., and Harris, F. G.: *Erosive and Gangrenous Balanitis*, *THE JOURNAL A. M. A.*, May 8, 1909, p. 1474.

ciently convincing, if their olfactory nerves are normal, that the fourth venereal disease is in itself the best possible argument for universal circumcision.

VII. AS A PROPHYLACTIC AGAINST PHIMOSIS AND PARAPHIMOSIS

What has already been said in favor of circumcision must apply with equal force in reference to the occurrence of phimosis and paraphimosis. Here we have a purely mechanical condition to deal with—one which cannot exist in those who have been properly circumcised. Joly,[†] the French surgeon, estimates that fully 12 per cent. of all infants present a congenital phimosis at birth. It is conceded even by those who condemn ritual circumcision that in the presence of either of these conditions, circumcision is imperatively indicated; conversely, it is apparent that the only way to prevent their occurrence, with all the ills that go with them, is to circumcise all male children.

In elderly men, with the passing of the sexual function, the prepuce undergoes involution with the rest of the genital organs, and as a result, retraction becomes more and more difficult. Chronic phimosis is the outcome, bringing with it a retention of secretions, masturbation for the relief of the irritation, and occasionally the deposit of urinary salts in the preputial cavity and the formation of preputial calculi. In this connection, Corner⁷ says:

Sometimes the timely operation of circumcision does much to save a patient and his friends from remorse, misery and perhaps, shame. Much might be done for the comfort of the individual, and the happiness of mankind in general, if circumcision of the elderly were more frequently undertaken.

Zuckerkandl of Vienna reported thirty cases of preputial calculus, and Velpeau found a stone in the preputial cavity which weighed 130 gm.⁵

It is also interesting to note that the condition of bilharziosis is strongly associated in the literature with the presence of a prepuce. It is the opinion of some writers who have observed this disease that the bilharzia is not taken into the stomach, but that it enters the body through the urethra while the patient is bathing. This is the opinion of J. F. Allen,¹⁹ who has practiced for years in Natal, Africa, and who, in a lengthy discussion of this disease, advises circumcision as the best method of preventing the infection.

Another point of interest worth remembering in connection with the subject of phimosis is that this condition often leads to the maldevelopment, or rather to the lack of proper development, of the sexual parts. It is not unusual to find, in a man otherwise large and well-built, a distinctly infantile development of the external organs. In such cases a tight or long foreskin will almost always be found, and if in these cases circumcision is done, the organ will often take on a startlingly sudden growth. In my own experience I have encountered at least a dozen instances in which this lack of development has been corrected by the performance of circumcision. Lydston,⁶ in commenting on this feature of phimosis, says:

Early circumcision insures proper development of the parts. It is a matter of common observation among physicians that the Jew is, on the average, less frequently sexually maldeveloped than the Gentile. The admirable custom of circumcision may have had much to do with the extraordinary virility and endurance of the Jews.

CONCLUSIONS

In closing this review of the subject, I venture the opinion that there is much to be said in favor of circumcision and very little, or practically nothing, against it. The most that can be said against the operation as a routine measure is that it is sometimes done improperly, with the result that infections of a serious nature follow. This, however, is a matter that should be considered solely in connection with the performance of the operation, and not with the operation itself. If there are men performing circumcision who are tuberculous or syphilitic, and who, because of their ignorance, spread infection to the infants on whom they operate, they should be taken in hand and weeded out by such means as may seem most practicable and feasible. But to condemn circumcision itself because of that fact seems to me to be worse than childish.

Circumcision must be considered one of the most beneficent measures ever devised for sanitary purposes in human beings, and it is to be wondered at that there should exist, at this late day, physicians who stand ready to condemn the practice.

It is indeed a curious fact that many, if not most, of those who oppose ritual circumcision are themselves Jews, and I can recall a conversation with an eminent physician, the son of a famous American rabbi, who boasted that he would not permit his sons to be circumcised. It seems passing strange that men should go so far in their worship of the unattainable as to forget that "all that glitters is not gold," even though it be such a worthy appendage as a prepuce. They also seem to forget that the Tenth Commandment specifically forbids us to covet that which our neighbor possesses, and in this general prohibition, we may surely include the prepuce, which the famous master Ricord designated as a "useless bit of flesh."²⁰

The pediatricians who see the evils of faulty circumcision or infections resulting therefrom should remember that they see only the exceptional cases in which the normal and usual result has not been attained. They should also remember that circumcision attains its greatest usefulness in adult life, and particularly when the individual is brought into contact with venereal infections. To those who are called on to treat the diseases acquired by men in maturity, the picture is entirely different from that seen by the pediatricist. The advantages which circumcision brings are best seen, not in childhood, but when the child becomes a man, when the pediatricist has lost track of him.

Quoting Lydston again:

It is strange that with the experience and example of this great race (Jewish) before him, the Gentile has not generally adopted as a hygienic custom the operation of circumcision. *It is the opinion of many eminent physicians that parents who do not have an early circumcision performed on their boys are almost criminally negligent. In this opinion I fully concur.*²¹

With this emphatic statement of belief and many others from non-Jewish sources and confirmed by the preponderance of expert opinion, I do not hesitate to conclude, notwithstanding the teachings of Maas and his supporters, that it is the moral duty of every physician to encourage circumcision in the young—and it is immaterial whether it is done as a religious rite or as a purely sanitary measure.

113 E. Nineteenth Street.

† Joly: *Histoire de la Circoncision*, Paris, 1895.
19. Allen, J. F.: *Lancet*, London, May 8, 1909.

20. Remondino: *History of Circumcision*, p. 206.
21. *Ibid.* in original.