urine was of proper specific gravity; there was no albumen; the quantity secreted in the twenty-four hours was natural. The uterus was found to be still larger than natural, and in a state of partial prolapsus. The latter condition was the cause of her being unable to walk. On her return from the sea-side in September, as the sense of bearing down, and difficulty in walking or standing for any length of time continued, with some amount of leucorrhœa, the cold water douche, with a tannic acid injection, were prescribed. These measures produced her complete recovery; the catamenia appeared naturally, and she was able to take proper exercise, becoming, in fact, "quite well."

ON VENEREAL AFFECTIONS OF THE EAR.

By WILLIAM HARVEY, Esq., Surgeon to the Royal Infirmary for Diseases of the Ear.

THE ear is subject to both the gonorrhœal and syphilitic forms of the venereal disease: in the present paper I shall confine my remarks to gonorrhœal otitis and otorrhœa.

As far as my reading has informed me, this disease of the ear has entirely escaped the notice of British surgical writers; I am not aware that even a single case is on record either in our systematic works on surgery, or in any of the English medical journals; and I am, on this account, the more anxious to call the attention of the profession to what I have found to be a most formidable and destructive disease.

Every surgeon is familiar with an obstinate form of infantile otorrhœa which occurs shortly after birth, not unfrequently destroying the organ, and producing, as a consequence, both deafness and dumbness for life. Is the lining membrane of the external meatus, like that of the conjunctiva, susceptible of the contagion of gonorrhœal matter, and the specific inflammation which constitutes that disease? This very natural inference has for many years suggested itself to me, in reflecting upon these most miserable cases. My attention was, however, newly awakened to this possibility by the following case, which occurred in my Dispensary practice in the spring of 1849.

J. B., a baker's man, aged twenty-three, had been confined to his bed for ten days with gonorrhœal inflammation of the urethra and swelled testicle. The account he gave of himself was, that during his confinement in bed, he had been seized with intense itching in his ear, accompanied with paroxysms of pain; and shortly afterwards, there issued a profuse yellowish discharge from the meatus auditorius externus. The pain in some measure subsiding shortly after the discharge had set in, he delayed speaking of it to his medical attendant for two days. Upon examining the ear at this period, I found the auricle red and swollen, a profuse discharge from the meatus, and the mucous membrane red and thickened. Having cleansed the parts from the discharge, for the purpose of more accurately examining the condition of the membrum tympani, I found this membrane already

perforated, and fast disappearing under the progressive ulceration. As the inflammation was still in progress, the patient was bled freely from the arm, and leeches repeatedly; and the ear was cleansed frequently with an astringent lotion. Although the patient was rigidly watched, and every means adopted calculated to check the progress of the morbid action, nothing appeared to have any control, until the disease had expended itself on the soft structures, and the organ was completely destroyed. I was at first at a loss to account for the violence of the symptoms in this case. It certainly did not follow the ordinary course of catarrhal otitis; the intensity and persistence of the inflammatory action, the colour and quantity of the discharge, and other peculiar symptoms of this case, clearly referred it to the category of gonorrhœal affections. Without adopting the vague and unsatisfactory doctrine of metastasis, it will, I think, be perfectly clear that the gonorrhœal matter might easily have found its way to the meatus of the ear. Let us suppose the man's finger to have been soiled with the urethral discharge, and that on occasion of an intense degree of itching in the external ear, (the very first symptom complained of by the patient), he had thoughtlessly and with some violence thrust his finger into the meatus, possibly abrading the membrane with his nail; all the symptoms are then most readily explicable. Active inflammation, we are aware, rapidly sets in when gonorrhœal matter accidentally comes in contact with the conjunctival membrane of the eye, and unless the patient is seen shortly after the seizure, and promptly treated, the eye is destroyed. And though, from the difference of structure existing in the conjunctiva and the meatus, the analogy is not perfect, still we do not know that the epithelial lining of the meatus is proof against the specific contagion.

With regard to the etiology of those gonorrhœal affections which occur in parts or structures remote from the usual locality of the primary affection, much difference of opinion has been entertained by surgical writers of the highest eminence. The possibility of the ophthalmic form of the disease being produced by direct contact with the virus has perhaps been denied by no surgeon, but in those numerous cases where the evidence of such contact is *nil* or doubtful, the theory of gonorrhœal inflammation by metastasis has been broached by Richter, Scarpa, Beer, Lincke, and other foreign surgeons of repute. Mr. Lawrence, perhaps more rationally, hesitates to admit that metastasis can exist; for this very obvious reason, that in the majority of these cases the urethral discharge is not either suspended or diminished during the very height of the ophthalmic symptoms.

"In a great proportion, however, of these gonorrhœal ophthalmiæ, we cannot trace the disease of the eye to the application of infectious matter, either from the same or another individual. The eyes are said to suffer by metastasis; it is stated that the gonorrhœal discharge is suppressed, and that the inflammation of the eye occurs in consequence of that suppression. Such is the representation of Richter, Scarpa, and Beer, who accordingly consider the restoration of the discharge from the urethra a principal indication in the treatment of the disease. In none of the cases, which have come under my own observation, has the urethral discharge been stopped; although it has generally been lessened, it has continued in some with little diminution. On the

other hand, the sudden stoppage of gonorrhœa, when effected by surgical treatment, is not followed by inflammation of the eyes. Since, then, gonorrhœal ophthalmia may occur, while the discharge from the urethra continues, and since it does not take place when that discharge is stopped, we cannot admit that the affection of the eye owes its origin to the cessation of disease in the urethra. I am inclined to refer its occurrence to the state of the constitution, without being able to point out in what that state consists; and to regard it as a pathological phenomenon analogous to those successive attacks of different parts which are observed in gout and rheumatism. The two other forms of ophthalmic inflammation, which take place in conjunction with gonorrhœa, show themselves only in rheumatic subjects, and generally in connexion with other arthritic sufferings; and the difference between one of these, and the affection now under consideration, is only in degree. This view of the subject may throw some light on the circumstance that, though direct infection operates equally on both sexes, the gonorrhœal ophthalmia, said to originate in metastasis, seems to be confined to the male; I have never seen it in the female, and Beer, in the passage last quoted, says, that he has observed it only in young, robust, and plethoric men. The state of constitution, whether hereditary or acquired, which leads to gout and similar affections, is much less common in women than in men; and will hardly be found at all among those young and previously healthy females, who are the principal subjects of gonorrhœa. Again, the morbid influences which are experienced and exerted by the male urethra, are different from those of the vagina."¹

In the unfortunate case with which I have introduced this subject, the urethral discharge was not suppressed during the destructive progress of the disease in the ear, consequently we cannot conceive that metastasis could have taken place.

The acute and observant Linche, has given the most full and satisfactory account of this disease occurring in the meatus which I have yet met with; and perhaps I cannot better conclude the subject than by translating from his very useful work, *Handbuch der theoretischen und practischen Ohrenheilkunde*, the following observations.

"This very rare form of inflammation, caused by the gonorrhœal poison, has its seat chiefly in the system of the mucous membrane, and is distinguished from the catarrhal inflammation of the ears partly by the absence of exacerbations and remissions; symptoms which appear especially in the incipient stages of the latter. Another criterion is the particular nature of the excreted discharge. The symptoms are the following:—if the aural gonorrhœa is confined to the meatus auditorius, and if it developes itself slowly, there arises a troublesome itching and burning, and a redness which uniformly spreads over the dermis of the meatus auditorius, without being accompanied by a considerable swelling, which symptoms are soon followed by an increased mucous discharge. If the disease has developed itself quickly, the symptoms of inflammation will be more vehement. The itching and burning which the patient felt at first, is soon followed by intense pains of a shooting character, which embrace the whole hemisphere of

¹ LAWRENCE on the Venereal Affection of the Eye.

the head, the lining membrane of the meatus becomes much swollen' and at the same time the external ear, especially the auricle, is reddened and swollen as in erysipelas. The patient is feverish, the pulse becomes hard and full, the tongue is loaded, and he complains of a buzzing and singing in the ear, and the hearing is impaired. As soon as the excretion of discharge has commenced in the meatus auditorius, the vehement pain will be a little allayed. The discharge has at first a whitish yellow colour, and is not very thick, but soon increases in quantity and colour, and exudes in large drops of a yellowish green colour, of a specific odour, from the meatus auditorius, which has become quite tumid. The discharge flows over the ear and the adjacent parts of the neck, whereby those parts become sore and covered with small pustules. After some time, the discharge becomes thinner, and of a more sanious character; the swelling of the meatus auditorius decreases, the channel becomes more free: and if examined after a previous cleaning, the skin will be found softened, and appears like velvet and of a sarcomatous (fungoid) appearance; the tympanum inflamed, perforated, and more or less destroyed. At times here and there ulcerations are to be met with, which, however, soon heal up. In some cases, a sort of chronic otorrhœa remains behind, which lasts at times for months, or, as Desanellis has observed, for years. If the process of gonorrhœal inflammation of the meatus auditorius has been very rapid, or if circumstances be very unfavourable; that is, if the gonorrhœa has been completely suppressed, or if the patient has committed some excess, the middle portion of the ear will also be affected, and in this case all the symptoms of *otitis interna* will make their appearance. The pains of the ear become vehement and pungent, occupy the whole of that side of the head down to the neck, the teeth, and the occiput, and are even accompanied by delirium. If the pains have reached the highest point, a suppurative process takes place in the tympanum; this will be perforated, and is often destroyed. If the disease be not now stayed, and if the ulceration proceed to the osseous tissue, then all those ulcerative and vegetative processes (sloughing and polypi) are to be apprehended, which have been mentioned in the description of the *otitis interna phlegmonosa*. Plisson states that at times, conjointly with the puriform discharge from the ear, a thick puriform matter is also issuing from the nostrils.

"The gonorrhœal inflammation of the ear may possibly arise from two causes: I. From a metastasis of the gonorrhœa; or, II. *From an infection of the ear through the gonorrhœal pus.* Metastasis arises, if an urethral or vaginal gonorrhœa is suppressed, either entirely or partially, by taking cold, or by the injudicious use of general baths or laxative remedies, or the too early use of so-called suppressing remedies, especially balsamic, astringent, or dessicative. Lentin mentions a case where, after suppressed fluor albus, a secretion was observed in the meatus auditorius; and Reil says that he has found a defluxion in the meatus, which was quite similar to leucorrhœa, and at times alternated with it. In these cases, the inflammation of the ears may develop itself a short time after the cessation or decrease of the gonorrhœa, especially if that has not been completely suppressed. *The infection of the gonorrhœal virus may be caused by the patient*

touching the ears after soiling his fingers with the virus, by the application of a cloth soiled with the virus, etc. It may be even the case, that the meatus of a child, passing through the gonorrhœal vagina, in the act of parturition, may become infected. In this case, generally speaking, the ear only will be affected. In many instances, the transplanting of the gonorrhœal virus from the vagina or urethra cannot be traced at all, so that the origin of the malady cannot be accurately ascertained. It seems, after all, that for the development of the aural gonorrhœa, a certain disposition towards inflammatory disease of the ear is required."

As far as the prognosis is concerned, it may be called good, when the blenorrhœal inflammation is circumscribed to the meatus auditorius, when it does not arise from metastasis, but by inoculation of the gonorrhœal virus, and when complicated with other diseases: for the skin of the meatus auditorius does not possess enough of the nature of a mucous membrane, for a blenorrhœa in its most vehement form to develop itself. Much more disastrous for the organ of hearing is this disease, when it attacks the middle portion, as in this case, even in the most favourable contingency, no perfect cure nor restitution of the hearing faculty is to be anticipated.

2, Soho Square, January 1852.

ON THE RELATIONS OF UTERINE TO CONSTITUTIONAL DISORDER.

By F. W. MACKENZIE, M.D., Physician to the Paddington Free Dispensary for the Diseases of Women and Children, Fellow of University College, etc.

(Continued from p. 1103 of Volume for 1851.)

THE following cases are brought forward in illustration of the observations which I have made, on the subject of the relations which subsist between uterine and constitutional disorder. In those observations I have endeavoured to show how extensive and important is the influence which is exercised, by various morbid states of the constitution, upon the uterine organs; how these operate, not only in originating, but in maintaining a state of uterine irritation and disorder, which is immediately productive of various uterine symptoms; and how necessary it is to investigate and appreciate fully this influence in the treatment of such diseases.

The subjoined cases will, it is believed, affirm fully the correctness of these views, whether regarded with reference to their history, or the results of treatment. They are submitted to the profession in the hope that, whether they are considered to support the opinions which have been expressed, or to militate against them, they may be useful in elucidating the pathology and clinical history of uterine diseases, and directing attention to the necessity and importance of constitutional treatment, in their general management.