which proved fatal. If the literature were examined, it is likely that other cases might be found. In my own experience, and in that of everyone to whom I have described it, the above case is unique and seems worthy of being recorded.

CONGENITAL OCCLUSION OF THE URETHRA.¹

By JAMES ADAMS, M.D., F.R.C.S.Eng.,
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My attention has been directed to this rare condition by a case which occurred in my practice in October, 1889. I attended a confinement, and after a natural labour a male child was born at full term, who was well formed, and in every respect apparently normal, except he was the subject of hypospadias. Two hours afterwards I was sent for to see the child, because the nurse, who was a trained and intelligent woman, thought something was wrong, as the infant, although he had been bathed and dressed, and had passed a motion, had not micturated. The meatus was patent, so I tried to pass a small blunt silver probe down the urethra, but it would go only a very short distance. I directed the nurse to give the child a warm bath and keep him in the water for fifteen minutes, and to repeat the bath two or three times during the next twelve hours if no urine passed.

The next morning, fifteen hours after birth, I found that no urine had been passed and the child was beginning to be restless and uneasy, but without symptoms of distress. I again tried to pass, with all gentleness, the silver probe, and failed to get it further than the previous attempt. I now took a small French catheter, and that seemed to be brought up at the same distance from the meatus. Being a non-metallic instrument, I used as much force as it would bear, but did not succeed in getting beyond the obstruction. I withdrew the catheter and tried again, and this time succeeded in penetrating what I believe to have been a thin membranous structure which was occluding the urethra. The urine came freely through the catheter, and I had no further trouble with the case.

It is open to remark that the urethra might not have been occluded, being merely narrowed by a congenital stricture, or that the urethra was of normal calibre, and that its sides were agglutinated by inspissated secretion. While I am unable to disprove either of these opinions, I may say that had it been a stricture I should have expected subsequent trouble, and had it been the other condition I should have expected the hot baths externally, and the effect of the warm urine internally on the vesical side of the obstruction to have caused its disappearance. Another point tending to support my view that it was an organic occlusion of the urethra is the fact of the infant being a hypospadian, showing some developmental abnormality of the mesoblast in this region. And in a case of congenital occlusion reported by Mr. Forster, of Darlington, in the *BRITISH MEDICAL JOURNAL* of January 3rd, 1885, the infant was also the subject of hypospadias.

The only other instance I have met with of this condition was in 1878. This was a premature child, born at seven months, and a weakly specimen for that age. I was unable to pass a probe or catheter, and the child died forty-eight hours after birth, never having passed any urine. The child was too feeble to bear any further surgical proceedings, even if the parents would have consented.

The literature of this subject is very scanty, and in several of our English textbooks no reference is made to it. American works contain the fullest account of it, and I quote the following by Professor Duplay from *The International Encyclopedia of Surgery*, edited by John Ashhurst, M.D. :—

"These occlusions, which result from gluing together of the two corresponding halves of the penis, may occupy any point in the canal, but the meatus urinarius is the seat of election. Sometimes the mucous membrane of the glans is seen to pass in front of the meatus without anything being seen at this point which could indicate the existence of an orifice..... Most frequently the meatus is well formed, and ends in a *cul de sac* at a distance of a few millimètres. We have only a very small number of examples of occlusions situated at

other points of the canal. The diagnosis is especially easy when the occlusion is in the meatus or in the fossa navicularis. Deeper occlusions may escape the first examination, but the ineffectual effort of the infant to urinate, and sounding with a curved stylet or very small catheter will usually render error impossible."

I will also give the short description found in Gross's *Surgery* :—

"The most common of these congenital vices are first closure or contraction of the meatus; and, secondly, absence, contraction, and change of form of the urethra. Occlusion of the external meatus always demands prompt interference. When it is caused simply by a duplicature of the lining membrane forming a sort of hymen, a vertical incision in the direction of the natural outlet is generally all that is required, the edges of the wound being kept asunder by means of a bougie. When the imperforation depends upon the presence of fibrous tissue and reaches a considerable distance back, the operation will be more serious, and will require to be performed with a trocar."

The diagnosis in these cases is easily made, for the subjects are newly born infants who are unable to pass water, and if the obstruction is at the meatus the condition is at once recognised, and if the obstruction is further down the urethra, the use of the catheter makes it evident. If the surgeon is unable to penetrate the obstruction by means of a soft catheter, he cannot judge how far the occlusion extends between the point where the catheter is brought up and the bladder, as it may involve the whole of that portion of the urethra, or only a small part of it.

On the question of treatment the proper course to adopt is clear where the occlusion consists of a membranous veil covering the meatus. This veil must be incised, and the orifice kept patent by passing a bougie daily for a week or ten days. Also in cases similar to mine, where a non-metallic catheter can be with moderate force thrust through the soft and easily lacerable membrane occluding the urethra, this treatment is clearly the one to follow; but in those still rarer cases where the urethra is obliterated for some distance, it appears to me there presents itself to the surgeon a most unfavourable condition to deal with satisfactorily.

Three courses are open, namely (1) forcing a passage by means of a curved stylet, or small curved trocar and cannula; (2) perineal cystotomy; (3) suprapubic puncture. The objection to forcing a passage is that it is an unsurgical and hazardous proceeding, and that you are working in the dark and have no guide to rely on. If you reach the bladder so much the better for your patient, for your treatment saves his life and leaves him with a urethra in its normal position.

Another argument in favour of this course is that it has been adopted with success, notably in the case mentioned above, where the urethra was said to be wholly obliterated. With regard to perineal cystotomy by the median method with the finger in the rectum, the distance to reach the bladder is short, and as it would be distended, one would feel more certainty of finding it than by the first plan. But I should give the preference to suprapubic puncture by small trocar as being simplest and safest, and I should fix in a rubber catheter and wait upon events. Afterwards, when the child was old enough, the suprapubic opening might be enlarged, the bladder explored, and a passage made from its interior by means of a curved trocar and cannula as near along the normal position of the urethra as could be ascertained.

A CLINICAL NOTE ON THE SOPORIFIC ACTION OF MERCURY.¹

By W. J. TYSON, M.D.,
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I AM not aware that the above action of mercury in the class of case I am about to describe has been recorded. No doubt the fact is known to many of you, yet it does not appear to me to be so generally, and that is my reason for bringing the subject forward at this meeting.

The cases in which I have found blue pill—for this is the

¹ Read at a meeting of the East Sussex District of the South-Eastern Branch of the British Medical Association.

¹ Read in the Section of Medicine at the Annual Meeting of the British Medical Association held in Birmingham, July, 1890.