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.,
Eastbourne.

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.,
Folkestone.

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.

form of mercury I am referring to—give such good soporific effects are rather difficult to describe, and must be given in a more or less general way. Many men would call them cases of biliousness, and for want of a better term I am content to use it. The patients are generally over 40, complaining of lassitude, loss of appetite, a general fullness of the abdomen, pains in the shoulder-joints, tongue generally of a whitish brown colour, a nasty taste in the mouth, eyes are rather "thick," a want of clearness of thought, more or less dull pain in the head not confined to any one particular spot, irritability of the skin, and, above all, sleeplessness at night. There may be many more symptoms and signs than the above, or few of them may be present, but, when the symptom of sleeplessness is prominently complained of, it is here that we find the soporific action of blue pill followed by saline draughts peculiarly brought out. Now, the symptoms detailed are principally those found under the heading of bilious dyspepsia, but there is this important clinical difference: whereas sex, richness of food, want of exercise play important parts in producing the above form of dyspepsia, the cases that I have in mind are found as often, if not more so, in women, and where the plainest diet and moderate exercise have been taken.

There is a little doubt that the sea air has something to do with the above state of health; people who have come down to the seaside after a long residence inland frequently develop after a few days' sojourn all the aforementioned symptoms. I believe that we who practise in seaside resorts would less often be called upon to prescribe for this condition were a little mercurial taken immediately by the patient on his arrival, but perhaps, on the whole, this had better be left in our hands.

Again, I do not associate these cases with those which are commonly called "lithæmia," or the substitution of uric acid for urea as the final product of disintegration of albuminous substances within the body: under this last condition you obtain the more remote symptoms of gout.

What is the exact action of the mercury which brings about the above happy result I do not know, nor am I anxious to speculate or propose theories. Murchison supposed that it possessed a double action, for whether or not the secretion of bile was increased, there was certainly more bile passed when mercury was being taken; thus an eliminating action was brought about, so that less of the bile constituents were absorbed from the intestines than usually. Again, he supposes, in some way or other, the albumen is more thoroughly disintegrated. But what is important for us to know is the use of a drug which will enable you to give your patient a good night, whilst at the same time you are treating the root of the disease, and apparently not giving ordinary soporific drugs.

It is needless for me to use any padding to this paper in the way of quotation of cases; they would be uninteresting and wearisome; and the title of my paper does not admit of it.

THE TREATMENT OF SPASMODIC TORTICOLLIS BY EXCISION OF THE SPINAL ACCESSORY NERVE.

By F. A. SOUTHAM, M.B.Oxon., F.R.C.S.,
Surgeon to the Manchester Royal Infirmary.

THE three cases recorded below illustrate the beneficial effect of excision of a portion of the spinal accessory nerve in obstinate cases of spasmodic torticollis. In each instance the spasm, which chiefly involved the sterno-mastoid, was of a severe nature, quite incapacitating the patients from following their occupation; it had come on without any apparent cause, had been present for some months, and had resisted all the ordinary methods of treatment, for example, large doses of bromide of potassium, galvanism, massage, counterirritation, etc. Two of the patients had been specially sent to my colleague, Dr. Ross, to receive the benefit of his advice, and it was at his suggestion that neurectomy was performed.

The operation was carried out in the same manner in each case. An incision three inches long was made along the anterior margin of the upper end of the sterno-mastoid, and the nerve having been exposed by a careful dissection, about one-third of an inch of its trunk was excised just before it enters the under surface of the muscle. The immediate effect of the operation was to completely paralyse the sterno-mastoid; the spasm ceased, and the position of the head at once became greatly improved. The head does not immediately become quite straight, for it appears as though the affected sterno-mastoid, as well as the muscles of the neck generally, become the seat of slight contracture or shortening, in consequence of the long-continued faulty position in which the neck has been held. This has to be afterwards overcome by manipulation—namely, by forcibly but gently straightening the head two or three times a day—assisted by an artificial muscle. The latter is provided by means of an elastic band fixed above to a poroplastic cap, and below to a belt or plaster-of-Paris bandage round the waist, and arranged in such a way that the extension acts in a line parallel with the unaffected sterno-mastoid. In some cases a second elastic band, attached behind in a vertical line from the occiput, will be found useful. The apparatus is worn for a few weeks or for several months, until the head has regained its normal position and can be held straight without any effort on the part of the patient.

CASE I.—Female, aged 31 years, admitted April 27th, 1889, suffering from tonic contraction of the right sterno-mastoid muscle. She enjoyed good health until about six months previously, when the head became gradually rotated to the left and drawn over to the right side. When admitted the right ear was almost in contact with the shoulder, and she complained of severe pain in the neck on the same side. May 29th neurectomy was performed.

CASE II.—Male, aged 35 years, admitted April 25th, 1890. In this patient the spasm, which had been present for about five months, in addition to the left sterno-mastoid, involved slightly the trapezius and scapuli on the same side. Some clonic spasm was also present, so that the head was not only drawn over to one side, but it also exhibited a constant rotatory movement. May 27th neurectomy was performed.

CASE III.—Male, aged 24 years, admitted September 16th, 1890. The spasm had been present for about three months, and the condition was almost identical with that met with in Case II. October 4th neurectomy was performed.

Present Condition.—In Cases I, II, where intervals of eighteen and six months have elapsed since the operation, the head can now be held quite straight, and the patients are following their occupation as usual. Occasionally, and generally towards evening, when tired and exhausted with their day's work, there is a slight tendency for the spasm to recur; this is, however, becoming less marked and less frequent (especially in Case I) as time goes on, and can always be overcome by an effort of the will. In Case III, where a month has now elapsed, the head is almost straight, and though it still requires some effort to keep it so for any length of time when the apparatus is left off, the condition of the patient is daily improving.

I have now performed the operation upon seven patients,¹ and the results have been sufficiently encouraging to make me recommend its adoption in similar cases when palliative treatment has been tried and found ineffectual.

The most suitable cases for operative interference are those in which the spasm is tonic in its nature and confined to the sterno-mastoid; but even if other muscles have become involved, excision of a portion of the spinal accessory nerve is still worth a trial, for no other plan of treatment is likely to be attended by such satisfactory results.

¹ My first three cases, together with a more detailed description of the operation, will be found recorded in the BRITISH MEDICAL JOURNAL, 1885, July 11th. Case III, which had been operated upon only a few weeks previously to the publication of the paper, was there described as unsuccessful, but after the patient left the hospital the spasm completely subsided, and has never returned.

SIR ALGERNON BORTHWICK will take the chair at the festival dinner to be held on May 11th to commemorate the twentieth anniversary of the foundation of the Chelsea Hospital for Women.