Lettsomian Lectures

ON

THE SURGICAL DISEASES OF CHILDREN.

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BY

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LECTURE II. (*Concluded.*)

THE DIFFERENCES IN THE SURGICAL DISEASES OF THE URINO-GENITAL ORGANS IN THE CHILD AND ADULT.

ALMOST every surgical affection of the urinary organs in children is primarily manifested by irritability of the bladder. This symptom may exist alone, or it may be associated with others; but it is unhesitatingly the chief and most prominent symptom by which the attention of the parent is first directed to the part.

By far the most common cause of this irritability is to be found in the condition of the penis; a long prepuce, retention of the secretion from Tyson's glands around the corona, or an adhesion between the prepuce and the glans penis, being amply sufficient to produce this symptom, and, indeed, almost any or every other symptom of vesical disease.

I have seen this simple condition of penis produce every degree of irritability of bladder, even to hæmaturia. I have seen retention of urine result from the same cause, and also constant priapism.

The following cases will, perhaps, best tend to illustrate these points.

CASE I. A boy, aged 1½ years, was brought to me in July 1862, with great irritability of bladder, which had been observed for many months, and hæmaturia of six weeks standing. The pain which the child experienced in micturition was apparently very severe, as it was always followed by a shrill scream. On examining the penis, the prepuce was found to be very long and adherent to the glans. Circumcision was performed, and the adhesions were torn away, perfect recovery rapidly following.

CASE II. A boy, aged 3 years, was brought to me in Oct. 1862, his mother having observed that the child had constantly from birth played with his penis after micturition; and for six months he had had at intervals a somewhat profuse hæmaturia. On examination, I found that he had an elongated and adherent prepuce. Circumcision was consequently performed with complete success, every symptom of distress rapidly disappearing.

CASE III. A boy, aged 20 months, was brought to me in June 1861 with retention of urine; the mother stated that he had had no relief for three days, and he was becoming drowsy. He had been suffering from occasional attacks of retention of urine for six weeks, having passed two days on several occasions without relief. On examination, his prepuce was found to be firmly adherent to the glans penis, and a quantity of retained secretion was also present. Circumcision of the prepuce and its complete separ-

ation from the glans was performed; and a catheter was passed, by which at least a pint of urine was drawn off. Convalescence followed; and, although he was under observation for three months, no return of his symptoms had been observed.

CASE IV. A boy, aged 2 years, was brought to me in May 1862 for constant priapism, the mother having observed that such a condition was always present. On examination, it was seen that he had an adherent and lengthened prepuce; consequently he was circumcised, and the adhesions broken down, a complete cure following. It must be added, that this child was said to have had an attack of tetanus when teething.

It is hardly necessary to quote other examples illustrating the same subject. The above are typical of certain classes, and have been selected from their extreme severity; it is enough, therefore, to add the caution that, in all cases of irritability of the bladder, or in any cases in which urinary disorder is suspected, the first inquiry should invariably be directed to the condition of the penis; for I have shown that almost every symptom of urinary disease may be produced by an elongated or adherent prepuce.

When any young subject is brought to me with a history of calculus vesicæ, I am always at first disposed to doubt the fact of its existence; for, in by far the larger proportion of such cases, the symptoms will be found to be due to the simple affection I have just described; and too often an opinion has been given to a parent that a stone exists, when every symptom has been produced by the condition of penis which has been already dwelt upon. The importance, therefore, of recognising the truth of these remarks cannot be overestimated; for, if the nature of the case be mistaken, the fear of the parents of a child will be unnecessarily excited; and the necessary and simple means which are required to effect a cure will be omitted, and the suffering of the child consequently prolonged.

Treatment. In all these cases, circumcision is the only correct practice. The prepuce must also be carefully separated from the glans penis; and all retained secretion from Tyson's glands removed. Common cleanliness is all that is subsequently demanded, and a good and permanent cure may, with confidence, be pronounced. No other measures will have a chance of succeeding; and it is only for the practitioner to realise the connection between the symptoms and their cause, to understand the importance and necessity of the practice which has been brought before you.

Idiopathic or Inflammatory Stricture is an unknown disease in early life; although cases of stricture are occasionally met with in practice, the nature of which is somewhat inexplicable; for, unless some injury to the urethra have been previously experienced, and as a consequence some subsequent contraction have taken place, producing what is described as a traumatic stricture, no other cause for an urethral contraction is generally looked for.

It is, perhaps, hardly fair to regard all cases of stricture which cannot be put down to the result of injury, as cases of irregular development; but such an explanation appears most probable, although I have no proof to bring forward to support this theory.

I have had a case of so-called stricture under

my care, in a boy only 9 years old ; but I do not think it necessary to take up your time by dwelling at greater length upon the subject.

Extravasation of Urine. When extravasation of urine is found in the *adult*, it is almost invariably due to an urethral stricture ; when found in the *child*, it is almost always produced by an impacted urethral calculus ; for I have already stated that, independently of some accident to the urethra, idiopathic stricture is an almost unknown disease in young life ; and I think it can be stated with equal truth that extravasation of urine from an impacted calculus in the urethra of an adult is very rare.

Extravasation of urine, therefore, when found in children, is almost always the result of an impacted calculus. It is to be treated also upon only one plan, and that is, by opening the urethra and removing the stone. It is not in every case that a calculus will be detected ; for the stone may be small, and under such circumstances it may be lost in the sloughing and oedematous tissues ; but in the majority of instances it will be detected at the time ; and if otherwise, it will be found at some future period in the discharges which come away.

I possess the records of at least a dozen instances of this affection, and in all of these the practice just laid down was followed ; in such cases, also, a good result may be anticipated if they be taken early and the extravasation of urine have not been too extensive.

This point of difference in the cause of an extravasation of urine in the child and the adult is very marked, and is worthy of attention.

Stone in the Bladder. The two great points of difference between this disease occurring in children and in adults, are to be found in the established facts that two-thirds of the cases which come under observation in hospital practice are in children, and that not one in twenty of these cases proves fatal after operation. On the other hand, one-third only of the cases of stone in hospital practice occur in adults ; and of these one-sixth die after operation when performed during middle age, and one-half at a later period. Again, in the majority of cases of stone in children, the general health of the patient is very good ; indeed, when compared with other children, the inmates of a hospital, the subjects of stone are by far the most ruddy and robust ; and it is tolerably certain that the deposition of a calculus is not connected with any cachexia or feeble condition of the vital powers ; it is only when the calculus has existed for a lengthened period that the general health of the child begins to fail, and danger to life from its presence and from its operative treatment is to be dreaded. In another place (*Medico-Chirurgical Transactions*, vol. xlv), I have been enabled to show that in all cases of death after lithotomy, whether in children or in adults, extensive renal disease is the unquestionable cause ; and that this disease is a necessary result of the long continued presence of a vesical calculus.

In children, stone in the bladder is not a fatal disease, unless neglected, and it is very amenable to treatment, the operation for its removal being most successful, not more than one case in twenty proving fatal. This mortality includes the special risks which attend lithotomy and every difficult operation ; and also the more serious dangers to which a patient is always liable ; renal disease being the chief. As a

conclusion, therefore, I believe it may be left to the fancy or the fashion of the operator to select the form of operation which may be proper. The lateral and the median appear to be equally successful when skilfully executed ; the success of the operation depending little upon the one which is selected. If the patient be a healthy one, and either operation be carried out with caution, a good result may be fairly predicted ; but if the child be cachectic and the stone have existed for some years, or for a large proportion of the child's life, however well either operation may be performed, a bad result may be anticipated ; for it has been shown that, in every fatal instance of lithotomy, renal disease is the true cause of death, and that without such a complication, death is by no means common. The special risks of the operation itself and the results of accident are, of course, omitted in this estimate ; but, happily, these are rare.

From the influence of example, practice, and preference, I always perform the lateral operation ; and the straight staff is the one on which my choice falls ; but these points, I imagine, are quite unimportant if the execution of the operation be skilful and correct, and renal complications be not present. So let the advocates of Allarton's or the median operation dispute the value of the lateral ; and the advocates of the latter doubt the advantages of the median. For my part, I believe that both are right if rightly executed ; and that a fatal result depends upon other and less doubtful grounds.

THE FOSSIL REMAINS IN THE DRIFT. At a recent sitting of the French Academy of Sciences, M. de Quatrefages replied to certain doubts which had been expressed concerning the authenticity of the human jaw and flint hatchets found in the drift of Moulin Quignon. It had been objected that since the attention of geologists had been drawn to flint implements, very successful endeavours had been made to imitate them, and that a number of hatchets recently taken over to England had all proved forgeries. Now, that such has been the case with certain hatchets does not prove, M. de Quatrefages contends, that all should be counterfeit, and there were certainly many the authenticity of which remained unchallenged. Now, when he was on the spot, he made a labourer strike the soil with his pickaxe, upon which a flint hatchet fell out with the gravel, which did not seem to have been previously touched ; nevertheless an artificial cavity might have been made and the hatchet stuck in ; but at the moment of this discovery M. de Quatrefages perceived the point of another hatchet sticking out half an inch ; it was imbedded in gravel, which had evidently not been touched, and he got it out with his own hands. Here, therefore, there could be no deceit. This hatchet and the preceding one were both laid before M. Delesse, who, after a minute comparative examination, came to the conclusion that they were both authentic. As to the jaw, the only testimony in favour of its authenticity was that of M. Boucher de Perthes ; no doubt a most reliable testimony, but yet a solitary one. However, a minute examination of the relic, and a comparison of the earthy crust which covers it with the soil in which it was found, tended materially to confirm the opinion of its authenticity. M. de Quatrefages had tried to produce such a crust artificially, but without success. Nevertheless an analysis of the bone was to be made, to place the question beyond all doubt. He concluded with reading a letter from M. Delesse, in which the latter declared his firm belief in the authenticity both of these hatchets and the jaw.