THE BLADDER IN TABES.
By E. D'Arcy McCrea.

The information on the bladder in tabes which is to be gained from the literature is acquired with difficulty, for the neurologist has many other points to discuss in considering tabes, whilst the urologist issues a warning against these faux urinaires and is often content to leave it at that, or, at most, adds a brief differential diagnosis. Consequently when I had the good fortune to meet with some thirty of these patients having urinary symptoms I became interested in the urinary system of the tabetic and investigated these patients, carefully eliciting the urinary symptoms and then making a cystoscopic examination and cystogram. Whilst examining them I made a rough estimate of the urethral sensation as judged by the passage of an instrument, and of the vesical sense of distension and appreciation of hot and cold. The findings are presented in the following pages.

Symptoms.

The simplest classification of symptoms is, perhaps, that adopted by Schaffer:

(a) Continuous, either of paresis or incontinence, and
(b) Periodical, which are of the nature of crises.

I found the most complete account of the symptomatology in the writings of the syphilologist, Fournier. His list of the vesical and urethral symptoms which may arise in tabes and which may, though rarely, be the first signs of the disease, is very full.

He places them under five headings:

(1) Vesical paresis.
(2) Incontinence.
(3) Frequency.
(4) Vesical anaesthesia.
(5) Vesical or urethral crises.

(1) Vesical paresis is represented by the following symptoms: (i) micturition requires effort, is slow and laborious, and initial delay occurs; (ii) straining is necessary, especially in the morning when the bladder is distended; (iii) micturition occurs in several acts, a sudden interruption of the stream takes place, and it is only restarted by another effort, and the stream is poor and lacks force; (iv) the duration of micturition is increased. All these symptoms vary greatly in degree, and even the patient may be unconscious of anything abnormal; (v) a few patients must squat in order to micturate, and (vi) in rare instances, complete retention may occur, but more usually retention is latent, i.e., residual urine is present.
(2) Incontinence in these cases is of a special type, is always intermittent and almost always associated with the need to micturate, the bladder being more or less full. Often it is exclusively nocturnal, and it is commonly partial or incomplete, only some urine escaping and the remainder being retained by voluntary effort. The accidental or involuntary emission of a few drops is regarded by Fournier as an almost diagnostic sign of tabes; such an escape being often the result of surprise or a sudden movement.

(2) Frequency may be associated with the most urgent desire and vesical tenesmus; more rarely it occurs without tenesmus or pain.

(4) Vesical anaesthesia, when the patient only micturates from a sense of duty or a distended abdomen, is rare. More rarely still there occurs urethral anaesthesia, and the patient may know when he commences to micturate but not when he has finished.

(5) Vesical and urethral crises: these appear in the form of periodical attacks of vesical or urethral pain, or of bouts of frequency, or finally, they may occur as the most severe "vesical colic."

Of the series of thirty patients whom I examined, all showed "continuous" symptoms. Eleven patients clearly belonged to the paretic group, and I include here, for reasons which will appear later, those with symptoms of vesical anaesthesia; five others showed symptoms chiefly paretic. Four belonged to the group characterised by incontinence, and one had symptoms mainly of incontinence; urethral anaesthesia is a symptom of these patients. The accompanying table (Table I.) shows the chief differences between the paretic and incontinent. The figures in each column are those of the number of patients showing these symptoms from the two groups. Two patients had symptoms of mixed type and combined those of paresis and incontinence. Seven patients remain; four of these stated that micturition was normal, but investigation revealed frequency of micturition, and three complained of frequency. Three patients of the paretic group have had attacks of complete retention, and two micturate from a sense of duty. One patient of the incontinent group has complete urethral anaesthesia and only appreciates escape of urine by the dampness of his legs or clothing. It must be noted that frequency of micturition in these patients may be due to a variety of causes; it may be the result of diuresis; it may be due to a sphincteric paresis permitting of the entry of urine into the sensitive urethra, or it may follow infection. It is always necessary to be on guard against the complications of the clinical picture brought about by infection, which is not rare in these patients. It will be seen that I have divided these patients into two main classes: (1) the paretic and (2) the incontinent; and to these I would add a third smaller group, (3) those having mixed symptoms.