



**STRONG (C.P.)**

*With the writer's compliments*

CASES ILLUSTRATIVE OF SOME OF THE  
MORE UNUSUAL FORMS OF BLADDER DIS-  
EASE AMONG WOMEN.<sup>1</sup>

BY CHARLES P. STRONG, M.D.,

*Physician to Out-Patients, Massachusetts General Hospital; Assistant Surgeon, Free Hospital for Women; Assistant in Gynecology, Harvard Medical School.*

THE cases to which I invite your attention by the clinical notes I shall give this evening I have selected as representing either by the unusual severity of their symptoms or the obscurity of their lesions, some of the less common types of vesical disturbances. We are familiar with the more common forms which occur as accompaniments of gynecological conditions, either as reflex or mechanical processes; of those which disappear with but little if any local treatment, I shall not speak. The tendency is to assume that, given any pathological condition of the reproductive organs, bladder symptoms must by this be accounted for. Hence too often, exploration and careful diagnosis are neglected or postponed, and a disease which might be mild in its beginning becomes an intractable, chronic affair. Nothing is simpler than an examination from the meatus to the exploration of the whole interior of the female bladder. The endoscope with electric light is valuable but not necessary. The small endoscope I show here is sufficient, with the aid of an ordinary head-mirror and lamp. Since the introduction of cocaine, ether is not necessary, but is always preferable. Simon's plugs are the most desir-

<sup>1</sup> Read before the Obstetrical Society of Boston, April 12, 1890.



able form of dilators and furnish, too, an efficient instrument of aid in medication.

The first cases I shall consider are those of hæmorrhage from the bladder, not from malignant growths but from the villous formation resulting from chronic cystitis. These are not the usual forms in which the disease manifests itself. I have met with four cases in which a diagnosis of malignant disease of the bladder had been made, but which were cured without return, by the treatment employed.

The most pronounced cases were the following :

Mrs. McL., thirty-eight; married; no children. Hæmorrhage from the villi of chronic hyperplasia of the vesical mucous membrane. Referred to me in 1881 for palliative treatment of malignant disease of the bladder. In four years there had been steadily increasing pain about the bladder, with but little pain in micturition. The urine at times appeared slightly bloody. During the past year there had been decided deposits of a blood-stained sediment, and in the past eight months decided hæmorrhages had occurred, with the passage of large clots. During the past two months hæmorrhage had been so excessive as frequently to induce syncope. The patient was blanched, and certainly looked as if she had the cachexia of malignant disease. Micturition was frequent, but not extremely painful. The passage of a sound started up such decided hæmorrhage that it was necessary to dilate rapidly the urethra, which was free from disease. The finger entering the bladder met everywhere soft villous formations, many of which were capped by a phosphatic deposit. These outgrowths were especially massed in the vicinity of the ureters. The sharp curette was used to remove these, leaving a clean base everywhere, and immediately stopping the hæmorrhage. The bladder was drained and irrigated

several times daily with boracic-acid solution. The convalescence was uninterrupted, and the patient still continues well.

The treatment employed here is that with which I have obtained the best results in this class of cases; and in chronic cystitis it may well be employed. The curette is quite as useful in hyperplasia inside the bladder as within the uterus, and if employed early would in not a few cases do away with the necessity of establishing permanent fistulæ for drainage.

The cases in which frequent micturition is continued by a contracted bladder after cure of the original vesical disease form a series of which I wish to speak. Normally containing with ease a much larger quantity of urine than the male bladder, in consequence of lesions which especially involved the urethra, the bladder, by its reflex activity, is continually contracting, acquiring thickening of its muscular walls and assuming the shape of a firm, round ball with a very small cavity. There is but one treatment for this, — steady and progressive dilatation by frequent hyperdistention with aseptic solutions. Systematically pursued, this will certainly effect a cure, although much time may be required. An illustrative case is the following:

Miss T., single, twenty-two, consulted me October 26, 1883. For five years she had suffered from too frequent micturition. The exciting cause, she thinks, was hyperdistention from voluntary retention. From a comparatively insignificant beginning her condition had steadily grown worse, and at this time she passed her water every twenty minutes or oftener, day and night. For two years past she had received constant local treatment, but the bladder had never been examined. She was, of course, debarred from every enjoyment, and reduced nearly to a condition of insanity

from the loss of sleep and the suffering accompanying each act of micturition. The largest quantity of urine she had voided at one time for many months was less than four drachms, and this was in consequence of the rest obtained by opiates.

There was an anteflexion of the uterus, but without ether it was impossible to make a vesical examination, and as the patient refused this, for a month, I made a thorough trial of diluents and internal medication, and such sedatives as were not opiates. Her condition steadily grew worse. I had her keep a record of the number of times she attempted to pass water during twenty-four hours; the intervals averaged ten minutes.

Early in December, under ether, I made a thorough examination with the endoscope. The bladder wall was clear and free from inflammation, as I had been led to expect by the character of the urine. The urethra was the seat of intense chronic inflammation. I applied over the whole surface a strong solution of nitrate of silver. For the next few days the bladder was in a state of constant tenesmus, requiring full opiates to control it; but as soon as the acute reaction from the treatment passed away, almost imperceptibly the intervals between the acts lengthened.

January 15th. She retained her urine one hour.

February 15th. For several days has retained urine two hours during the day and two and one-half at night.

Early in March she had an attack of catarrhal gastritis which greatly reduced her, and there was a relapse to intervals of thirty minutes to one hour. Just previously to this attack she had gone three hours, twice, the longest period for years; but the *quantity* she passed at this time was not much increased. Up to this time I had been satisfied to refrain from any

interference with the urethra except by weekly or bi-weekly injection of a very weak solution of nitrate of silver. Examining again, I found there were several patches of urethritis that were not healed, and upon these the strong solution was applied; and again the interval lengthened to two hours.

There was one feature now prominent in the case that puzzled me. On one day she would pass her water every two hours; perhaps the next day she would go three hours or longer; and again the variation might be as great during different parts of the same day. Eliminating other causes, I attributed this to the amount of urine which was contained in the bladder, varying at different times, and found that when a certain limit was reached the call was imperative. I demonstrated with the syringe that when the amount of fluid in the cavity was more than three ounces then the desire to empty it was pronounced, and four ounces produced intolerable pain. As the patient was now quite strong, I began systematic dilatation by hyperdistention, and also instructed her to retain the water just as long as possible. Following out this course produced the most gratifying results. The progress was slow but steady.

In July she could with very little discomfort, retain the urine an hour after she first felt the desire, and after having been one year under treatment, she could attend to all her duties, social and domestic, free from any disturbance from her bladder. She usually rose once during the night, but not always; and during the day the intervals were no more frequent than normal.

There has been no relapse.

The treatment of this case is that which I have found most uniformly successful in inflammatory lesions of the urethra. It is the application of a strong,

almost caustic, solution of nitrate of silver through the speculum directly upon the seat of the disease.

CASE III. Retention of urine as a neurotic manifestation, with cystitis and subsequent malignant disease of the vulva, surrounding and including meatus.

Mrs. C., age thirty-seven, May 11, 1887, was referred to me, with the history that three weeks previously (April 18th) there was stoppage of urine, accompanied by bearing-down pains. This had never before occurred. The urine was drawn, but stoppage occurred again the next day. In short, the catheter had been required seven or eight times during the three weeks. Upon all other occasions the act had been perfectly normal. The closest questioning failed in eliciting any reason why the urine should pass at one time and stop at another. There was never any pain. The time of day or night, the condition, exercise or rest, none of these were disturbing factors. Once started, the stream always continued until the bladder was empty; but unless it started freely and immediately, neither straining or any of the usual aids, such as using water, etc., were of any avail. The only symptom the patient felt was "a kind of clicking feeling," and then the stream would not come. There was no uterine lesion.

It was difficult not to attribute the condition to some material obstruction as the patient was apparently as free from nerves as any woman one could meet,—a large, strong woman in the best of physical health. Since her catheterization the urine, she noticed, had become cloudy, and I found it full of pus. Evidently she now had cystitis, but improved decidedly with proper treatment. I could find no local lesion whatever by most careful endoscopic examination. There was no retention and no treatment for the next five weeks. Then, in consequence of living some days in

the midst of fresh pain, as she thought, she had strangury and retention. Again a month's freedom and one day's retention. Without ether I dilated until I could easily pass my finger into the bladder, which I explored thoroughly with curette, forcep and finger, but with former results. Following this, there was an interval of four months of freedom; then the catheter was once required; then two months' rest again. This brought the time to January, 1888. In examining, now for the first time, I thought there was some spasm at the neck of the bladder, so, January 18th, under ether, a most thorough dilatation was made, and the bladder and urethra explored in every way, but with entirely negative results. However, the patient was greatly relieved, and nothing more was heard of stoppage until January 18, 1889, just one year to a day from the last decided operation; then occurred retention. So matters went along through the summer. Occasionally, following a day of overfatigue or some severe mental strain, the urine would have to be drawn. There was no regularity.

The patient occasionally wrote to me; but having made up my mind that the trouble arose from some neurotic condition and would continue as long as the cause, I refused to do anything more; but in November, she appeared, stating that for a week past she had not been able to pass any urine, except it were drawn. Although the condition of the urethra and bladder still seemed normal, I noticed on each side of the meatus, and extending in a less marked degree above and below it, a hyperplasia of the vulva tissue, which seemed quite indurated at the base. This increased rapidly, and was extending up the under surface of the urethra into the vagina.

A piece submitted to Dr. Whitney was reported upon as follows:

BOSTON, January 2, 1890.

DEAR DOCTOR:—I have examined the specimen from the meatus received from you from the Free Hospital. It is composed of a connective tissue base, covered by thickened and irregular masses of epithelial cells. In general, the growth has the aspect of a papilloma, but in one place the cells have a tendency to dip into the tissues of the base. I am suspicious that it will recur.

Yours truly,

W. F. WHITNEY.

I operated thoroughly, removing all the diseased tissue. During convalescence retention occurred once, but ceased as soon as the dressing of iodoform was omitted.

I last saw the patient about a fortnight ago, and she reports that, at irregular intervals, the catheter has been necessary. I have given her a full-sized No. 30 bougie to use with regularity, hoping in time to overcome the trouble with the sphincter.

The nature of the case in one way is plain to me, that is, that many of the occasions when resort to the catheter has been necessary, are hysterical in their origin. But why the first retention in a woman whose mind, so far as can be told, has never been directed towards her bladder? There has been no attempt to win sympathy. The more I treat her the more lasting the relief; and yet neither I nor the gentlemen who have seen her with me have been able to find, either in the urethra, bladder or reproductive organs, any condition that would suggest a mechanical or reflex cause.

The occurrence of the malignant disease I regard as a coincidence merely. It is in this situation, an extremely serious condition, I have seen two, possibly three, similarly situated; and these have been more ulcerative in their character than this. Although I

cut and burned thoroughly, yet I cannot but feel there is the strongest liability to return of the disease.

I have regarded the development of malignant disease as a coincidence merely, but I am reminded by it of the development of a similar condition about an artificial vesico-vaginal fistula in a patient whom I had the opportunity of seeing with Dr. Forster. This raises the question in my mind as to how far the repeated dilatation might have been responsible for it.

CASE IV. The tendency to the formation of villous growths in chronic cystitis is rare, but even less common is it to meet with this condition in the urethra. I have seen it in but a single case, and in this associated with distinct fissure at the neck of the bladder and caruncle at the meatus. The cause of the trouble here was evidently mechanical, the cervix of a retroverted and immovable uterus being crowded hard against the urethra.

Mrs. W., age thirty-nine, consulted me first in June, 1887, for relief from constantly increasing frequency of micturition, accompanied by pain, tenesmus and bloody urine. The pain was of cutting character, and extended up both sides of the pelvis to the back. When it was possible to pass the water in a standing position the pain was diminished. Under no circumstances could the urine be retained if the inclination to pass it had been felt, and two hours was the maximum interval between the acts for several months past. The symptoms dated back about two years, but then the onset had been gradual. The urine was quite clear, except for the presence of some free blood. The patient had been told that all her troubles were due to the caruncle; but as this had been removed several times without relief, there was evidently some further lesion.

Under ether, by the endoscope the urethra was seen

to be covered with varicose and dilated blood-vessels in villous outgrowths from the meatus to its junction near the bladder. They stopped abruptly here, but there was a deep fissure at the vesical neck upon the lower side. The urethra was thoroughly dilated, its surface scraped, and painted with a strong solution of argentic nitrate. The walls of the bladder were hypertrophied, and the cavity would contain about three ounces. This treatment was followed by the bi-weekly injection of a weak solution of nitrate of silver and suppositories; but the latter, as in most of the cases that I have seen, appeared rather to increase the patient's discomfort, and their use was abandoned.

At the same time, I attempted replacement of the uterus, but this was too irritating, and except the employment of a single glycerine tampon placed so as to relieve the urethra as much as possible from pressure of the cervix, was abandoned. The patient steadily gained, except in the frequency of micturition which I attributed to the same cause largely as in Case II, namely, a contracted bladder. Systematically dilating it by hyperdistention, I had the satisfaction of overcoming this condition, and in September the patient was so well that she ceased attendance against advice, as I felt sure the cervix would again set up trouble.

In January, 1888, the danger-signal of the cutting pain on micturition forced the patient to come again for treatment. I found two patches, each about the size of a split pea, midway of the urethra, showing the characteristics of a subacute urethritis. With cocaine as an anæsthetic these were quickly dissipated; and at the same time, by packing with great care, I was able to lift the uterus enough to free it from the pressure of the cervix. Since that date the patient has been perfectly well except for the slight local irritation of the caruncle, which has recurred twice. Should it

again appear, I shall make a thorough dissection to remove entirely its base.

It was interesting here to follow the gradual and steady improvement that accompanied the treatment. Few, if any, classes of cases are more exhausting to the nervous strength of the patients than these of vesical disturbance, and the reaction of the local and nervous conditions upon each other are most unhealthy.

This case is one in which drainage through a vesico-vaginal or urethro-vaginal fistula would have been resorted to, I think, by many operators; but, as it was possible to give the patient all the necessary attention, it seemed to me the more conservative course was the better. Despite all that may be said in their favor, fistulæ put patients in uncomfortable relations to themselves and their surroundings; and one should, I feel, hesitate, and try many conservative lines of treatment before subjecting a patient to their annoyances and discomforts.

