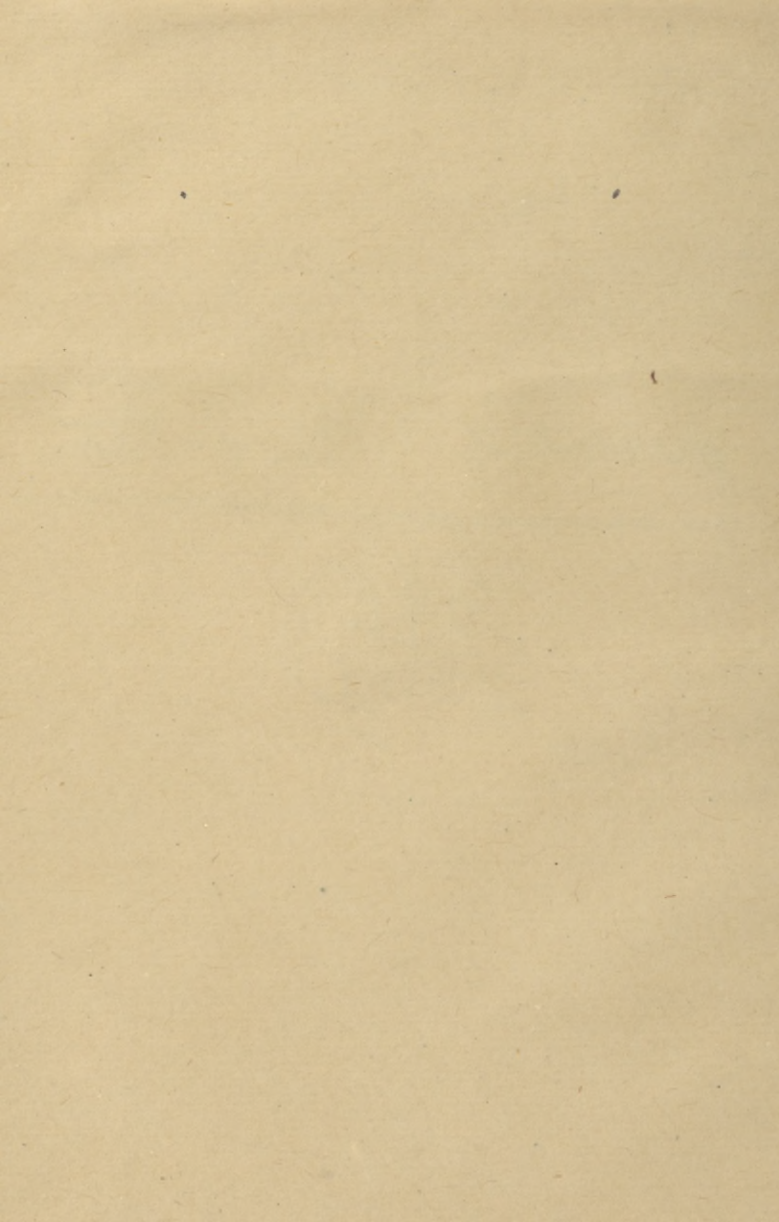


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TYPICAL CASES ILLUSTRATING THE
ADVANTAGES OF NITRATE OF
SILVER IN THE DEEP URETHRA.

presented by the author





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TYPICAL CASES ILLUSTRATING THE ADVANTAGES
OF THE USE OF NITRATE OF SILVER IN THE
DEEP URETHRA.*

BY GEORGE E. BREWER, M.D.,

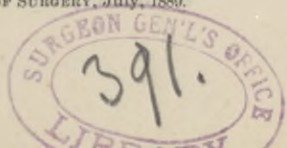
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CASE I.—E. S., aged 28, single, called upon me in March, 1888, suffering from hæmaturia, frequent micturition, pain in the glans penis, and marked prostration. He stated that he had had a severe attack of gonorrhœa six months ago, which was accompanied by an acute cystitis, which confined him to bed for several weeks.

For the past four months he has been obliged to pass water every twenty minutes during the day, and from six to eight times during the night. A slight hemorrhage always occurred at the close of each act of urination, and not infrequently the entire amount of urine passed would be so deeply colored as to resemble pure blood. The pain in the glans penis was often so severe as to cause the patient to violently squeeze the part to deaden its exquisite sensitiveness.

He had been treated by several physicians of prominence, and had been the inmate of at least two hospitals. The diagnoses which had been made at different times were cystitis, vesical calculus, tumor of the bladder, and tubercular ulceration.

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The circumference of the penis was three inches, the meatus admitted a 24 F., urethra was free to 30 F. from bulb to meatus. The deep urethra was excessively tender and bled freely after the passage of the sound. The urine was cloudy, alkaline, had a specific gravity of 1024, and contained one-fourth per cent. of albumen. The sediment consisted of pus, a few urethral epithelial cells, and crystals. The first specimen examined contained small urethra casts of blood, the second a large amount of blood and pus. Examination for stone proved negative. The diagnosis of granular prostatic urethritis was made, although the presence of a new growth could not be excluded until a satisfactory cystoscopic examination had been made.

The treatment consisted in absolute rest, the internal administration of boracic acid in five grain doses four times daily, and the use of a solution of nitrate of silver in the deep urethra by means of an Ultzmann's syringe. The strength of the solution at the beginning was $2\frac{1}{2}$ grains to the ounce, which was increased by $2\frac{1}{2}$ grains at each application. This treatment was repeated every second day.

After the third or fourth injection the hemorrhage entirely ceased, and the intervals of urination were increased from twenty minutes to four hours. The urine became clearer and acid in reaction. This treatment was continued until six applications had been made. One week later his meatus was divided to 30 F., and a 30 F. steel sound passed to his

bladder every third day for two weeks. The patient has since been in perfect health.

CASE II.—L. H., aged 18, suffered in the third week of his first attack of gonorrhœa from symptoms of so-called cystitis. He had painful and frequent urination and often passed blood at the close of the act. On one occasion he passed a membranous cast of the deep urethra, and several times small fragments of mucous membrane. His treatment for some days had consisted in washing out the bladder and the internal administration of morphine and boric acid.

This case was seen in consultation by Dr. F. N. Otis, who advised the immediate injection of a 5 grain to the ounce solution of nitrate of silver into the deep urethra and the use of a morphine and belladonna suppository—the injection to be repeated on the following day.

The relief was immediate and permanent. Before the injections were used the urine had been passed involuntarily by spasmodic muscular effort every five to ten minutes, each expulsion being accompanied by great pain. On the following day he was able to hold his urine for one or two hours, and after the second injection the urine was retained from three to five hours, and its passage was not attended with pain. There has since been no recurrence of his symptoms.

CASE III.—P. H., aged 45, single, gave no history of venereal disease. He had indulged in masturbation

and sexual excesses in early life. He complained of a "weak bladder and backache," and was compelled to urinate from twenty to twenty-five times in the twenty-four hours. Duration of these symptoms sixteen years. The patient states that he has been unable to work for the past two years. He has been treated by many physicians and at several hospitals, without obtaining relief. Examination of the urine showed it to be clear, of a specific gravity of 1020, and free from albumen, sugar or pus.

The circumference of the penis was $3\frac{3}{4}$ inches, the meatus admitted a 32 F., the urethra was free to 36 F., from bulb to meatus, and a 32 F. passed into the bladder. There was marked tenderness in the deep urethra.

An injection of silver nitrate, 5 grains to the ounce, was made in the deep urethra. Two days later the patient reported that he had urinated but six times during the past twenty-four hours. Another injection of silver, 8 grains to the ounce, was now made, after which he passed his urine only four times in the twenty-four hours. He also stated that the pain and weakness with which he had been troubled had entirely disappeared.

Two weeks later he was able to hold his urine from four to six hours during the day, and was obliged to rise but once at night.

CASE IV.—F. B., aged 36, had contracted gonorrhœa in early life. He had been married several years. During the past two years he had noticed a

gradual failure of his sexual power, and for the past four months had been unable to have connection with his wife, owing to the entire absence of erections or sexual desire.

The urine was examined and found to be normal. The circumference of the penis measured $3\frac{1}{4}$ inches. The meatus admitted a 28 F., the urethra was free to a 32 F., from bulb to meatus. The deep urethra was very tender, and the passing of the sound caused a "peculiar weakness."

The meatus was divided to 32 F., after which deep urethral injections of nitrate of silver were used three times a week, beginning with a solution of $2\frac{1}{2}$ grains to the ounce and increasing until 15 to 20 grains were reached. A 32 F. sound was afterwards passed once a week to the bladder. In two months he reported that he was able to have connection two or three times a week; and aside from a slight relapse which was caused by an attempt to pass a sound on himself, he has since remained well—now about one year.

During the past three years it has been my privilege to employ deep urethral injections of nitrate of silver upon upwards of 200 cases of genito-urinary disease. The symptoms for which this treatment was undertaken have been chiefly those of disturbances, more or less marked, of the function of urination, such as frequency, pain, hemorrhage, etc., or of the sexual function, such as frequent nocturnal emissions, persistent priapism, genuine spermatorrhœa, diminution or annihilation of the sexual function.

It has also been employed for the treatment of chronic urethral discharges.

The success which has attended the method of treatment has varied considerably, not only in the different classes of cases, but also in individual cases of the same class, in which the symptoms from a clinical point of view at least appeared to be identical. This variation I believe to be due to the degree to which the symptoms were occasioned by lesions in the deep urethra. These lesions may be the result of inflammation, new growth, or simply of an abnormal peripheral hyperæsthesia of that portion of the nervous system which is concerned in the operation of these functions.

In Case IV., the impotence complained of by the patient was undoubtedly due to local troubles in the deep urethra, and, therefore, yielded to the treatment employed. In the majority of these cases, however, the symptoms are not occasioned by a lesion of the deep urethra, but are rather due to nervous exhaustion, the result of prolonged sexual excesses, and are consequently not relieved by local treatment.

It is, moreover, often impossible to determine the degree to which the symptoms depend upon local lesions, except by the results of treatment. The four cases whose histories have been briefly outlined above were selected as affording examples of the class of cases in which the best results might be expected by the employment of this method. They also illustrate the promptness with which symptoms, often of the

greatest severity, will yield to therapeutic measures. In general terms it may be stated that the acuter the symptoms the more prompt will be the relief. I have no hesitation in saying that no method of treatment has, in my hands, proved so universally successful in the so-called "cystitis" occurring in the course of an acute gonorrhœa (which in reality is only an extension of the inflammation to the deeper portions of the urethra). I have frequently seen such an attack aborted by a single injection. In the non-inflammatory conditions, as in Cases III and IV, relief, though less prompt, is often striking. This class comprises a large number of cases, including various conditions of irritation which have been described by Civiale under the name of neuralgia of the vesical neck, and also the numerous conditions comprised under the term sexual neurasthenia.

There are other conditions which often show marked improvement when treated by this method, among which may be mentioned prostatorrhœa, recurring epididymitis, reflected neuralgias, chiefly those affecting the branches of the genito-crural nerve, and the irritation often present in senile enlargement of the prostate. Brilliant results are occasionally obtained in the treatment of these affections, but in a large majority of such cases the relief is uncertain and often but temporary.

As the object of this communication is simply to call attention to that class of cases most likely to be benefited by this treatment, a description of its ap-

plication, together with the theory of its action is purposely omitted. For this the reader is referred to the works of Ultzmann¹, Keyes², and Otis³.

(1) Pyuria, by Robert Ultzmann, M. D. Translated by Walter B. Platt, M. D., 1884.

(2) Chapter on Genito-urinary Diseases, by E. L. Keyes, M. D. Sajou's Annual for 1888.

(3) The Male Urethra, by F. N. Otis, M.D., 1888.

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