

THE PURPOSES OF URETER-CATHETERISM— PRESENTATION OF URETER-CYSTOSCOPE FOR MALE AND FEMALE.*

BRANSFORD LEWIS, M.D.

Professor of Genito-Urinary Surgery, Marlon-Sims-Beaumont Medical College; Genito-Urinary Surgeon to Rebekah Hospital, to City Hospital, Female Hospital, etc.

ST. LOUIS.

The purposes of ureter-catheterism in connection with the cystoscope are twofold: For diagnosis and for treatment.

DIAGNOSIS.

A. To locate the origin of pus, blood, tubercular products or bacilli, the various pyogenic infections, abnormally desquamated epithelium, etc., as to whether they come from (a) the bladder, (b) the right ureter, (c) the left ureter, (d) the right kidney (e) the left kidney, (f) the right or (g) the left peri-renal space and communicating with the corresponding kidney or ureter.

B. To recognize and locate obstructive conditions in the right or left ureter, from (a) stricture, (b) stone, (c) adjacent tumors, (d) bend or kink in the ureter from movable or dislocated kidney, (e) valvular junction of ureter and pelvis.

C. To determine (a) the presence of two kidneys, (b) if only one, which is absent.

D. To determine the number of ureters present.

E. To determine the functional activity of each kidney separately and relatively, with respect to its excretion of urea, albumin, quantity of urine, the specific gravity, etc.

F. To determine the size and capacity of each kidney-pelvis, with respect to (a) hydronephrosis, (b) pyonephrosis, (c) total obliteration of secreting kidney tissue.

G. If there be kidney disease present, to determine (a) if only one kidney is affected or both, (b) if only one, which is the affected one, (c) if both, which is the one more affected, (d) if removal of the worse one be advisable, is the other able to carry on kidney functionation sufficiently; (e) if removal of one be advisable, and the other is capable of supporting life, will the operation remove the infection from the body, removing possibility of dissemination or recontamination?

TREATMENT.

A. To enlarge narrowings or strictures at (a) the ureter openings, or (b) in the channel of the ureters. By facilitating drainage through the increased ureter caliber, thus obtained, to assist in the improvement of pyelitis, or pyonephrosis, unilateral or bilateral.

B. To irrigate and medicate (a) the ureters; (b) the kidney pelvises of one or both sides.

C. To assist, by anesthetizing and enlarging the ureter opening, the passage through it of a calculus or a plug of pus, blood, etc.

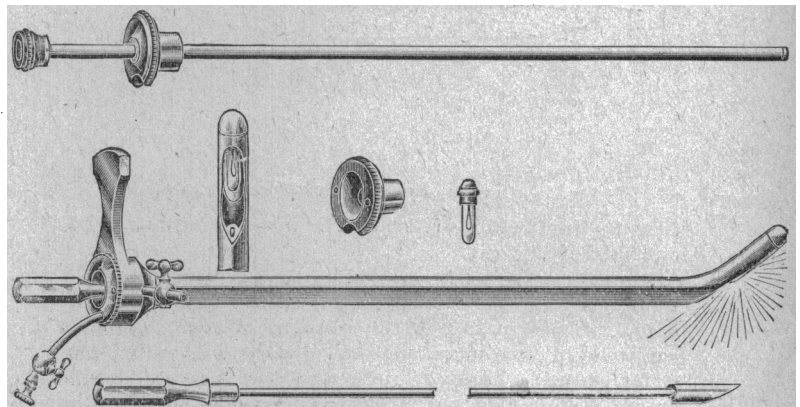
To accomplish the purposes above described one must have an instrument that effects ureter catheterization easily and quickly without causing trouble to the patient or bad after-effects. I believe I have accomplished this result in the ureter-cystoscopes for male and female which I herewith present. The instrument consists, as you see, of a straight tube through which one looks directly at the object without the intervention of lenses and without the accompaniments of refraction, absorption of light, etc. The illumination is made by a cold electric lamp, which allows the use of the cystoscope

in the bladder without introducing water and without burning the patient. This obviates the difficulties coming from the clouding of water, since air is used for distending the bladder. Air, of course, can not be clouded by the inflowing of blood or pus in ways that destroy the transparency of a liquid vehicle.

With cocain anesthesia the process of ureter catheterization is easily accomplished in either the male or the female with this instrument. I have used it upwards of three dozen times this spring, mostly in my office, allowing the patients to get up and leave immediately afterward and go about their business.

It has enabled me to accomplish something else which I believe will be very valuable in cases of pyelitis: that is, washing out the kidney pelvis in chronic inflammation of that organ, either unilateral or bilateral. I have done it in both the male and the female in a number of instances. In three cases which were the subject of chronic unilateral pyelitis I washed out the affected kidney pelvis with marked improvement and no detriment.

The advantages in favor of ureter-catheterism as compared with segregation are very great. In the matter of diagnosis, if one uses the segregator and gets tuberculous urine, for instance, from one side, and clear urine from the other side, he is still unable to say just



where the tuberculous urine comes from—whether it comes from the bladder on that side or the ureter on that side, or the kidney pelvis on that side; whereas, if he catheterizes both ureters and gets tuberculous urine from one side, he knows that it does not come from the bladder on that side. If he runs the catheter up to the kidney pelvis he knows that it does not come from the ureter, but does come from the kidney pelvis, or kidney itself on that side. So that the segregation method is a very inferior method, in my estimation, as compared with ureter-catheterism. Of course, one can not do anything in the way of treatment of the ureters or kidney pelvises by the use of the segregator, such as he can do by the use of ureter catheterizing methods.

One case illustrating another advantage of ureter catheterizing over segregation is that in which I put the ureter catheter about four inches into the left ureter of a male patient. At first nothing drained, but on strong aspiration with a syringe I was able to pump out a teaspoonful of pure pus that was not draining through the ureter, nor would it drain through the ureter catheter except under the influence of strong aspiration. This determined, of course, that there was no drainage of urine from that kidney—that there was an infected pus sac, which proved to be the case in our cutting down into the left lumbar region and finding a collection of more than a pint of thick pus and a stone

* Read at the meeting of the Missouri State Medical Association.

in the kidney pelvis on that side. The segregator, in this case, even if it had obtained the purulent urine from the left side and clear urine from the right side, would not have made the positive indication for operation that was made by the finding of a large collection of pus by the ureter catheter.

While the instrument illustrated does not afford the ability to catheterize both ureters at the same time, I have one which does accomplish that purpose, that is, the catheterism of both ureters at the same sitting, the drainage of both ureters coincidentally, allowing of comparison as to, not only the quality of urine, but the quantity as furnished by the two kidneys at the same time and under the same general influences.

627 Century Building.

THE ROLE OF SYPHILIS AS A CAUSATIVE FACTOR IN THE PRODUCTION OF PYORRHEA ALVEOLARIS.

A. H. OHMANN-DUMESNIL, M.D.
ST. LOUIS.

Pyorrhea alveolaris, variously known as Riggs' disease, Fauchard's disease, and by some other names, remains to this day a *bête noir* to dentists. This is mainly due to the fact that they can not cure it, and the best methods at their command to-day lie in prosthetic dentistry. Without desiring to pose as a carping critic, the method is bad and is surely a *petitio in forma pauperis* to him who is able to observe and to reason.

In this trouble, as well as in others, it is necessary to determine the cause and then properly treat it or eliminate it, and it is to this very question of cause that the present is written. He who has had an opportunity to observe a number of cases of syphilis has not failed to observe that a peculiar manifestation shows itself at first in connection with the lower canine teeth. This will then spread to the incisors and at times to the first bicuspid. If the examination be pushed a little farther the gum covering the tooth root will be found to be reddened and angry-looking, and if it be pressed some pain is elicited and pus is found to exude apparently from the alveolar process. This it is which has led dentists to regard it as a purulent destruction of the alveolar, because drawing the tooth did not reveal any marked alteration of the bone during the earlier period of the disease, but rather a marked collection of pus in the alveolar cavity.

As a natural consequence it was found much easier to clean out the alveolar cavities, and patients were advised to have all the affected teeth withdrawn and replaced by a bridge, which is certainly more profitable to the dentist while more inconvenient to the patient. As an example of prosthetic dentistry it is certainly a success, but as a means of cure it is anything but such. The object of this paper, however, lies without the province of stomatology, the only object being to find and determine one of the causes of pyorrhea alveolaris. I was attracted by the name at first, and endeavored to familiarize myself with the appearance of the disease. Later on, I carefully examined every case of syphilis coming under my observation, as I do now, and I noted the facility with which pus could be made to exude from the alveoli by simple pressure on the gums. This led to a further search, which led to the discovery of the same condition in individuals who were suffering from gout and other so-called dyscrasia. The inevitable conclusion would be that these general conditions were the cause of the local symptoms observed. In other words, the trouble of the alveolar process was

nothing but a local indication of some general condition which existed and which should be corrected in addition to the elimination of the local trouble which manifested itself.

It was then that a more careful examination of the teeth of syphilitics was entered into by myself, and the result was the finding of a comparatively large number of cases of pyorrhea alveolaris. Upon request a number of dentists submitted cases to me. These were very carefully questioned, and about two-thirds gave a history of syphilis. A sufficient number existed to classify them as cases of syphilis *ignorée*, or as old cases of tertiary syphilis in which this was the only bone symptom to be observed. However this may be, the subsequent treatment showed that the etiology had been correctly established and, as a natural consequence, the treatment was successful. This, however, is not to the purpose.

In view of the fact that the few observations made by the writer have shown a greater or less interdependence between syphilis and pyorrhea alveolaris, would it not be a useful matter for every one to pay more attention to the dental trouble? To say the least, is it not a curious coincidence that Riggs' disease should be observed in so many cases of secondary syphilis as well as the late form of this period? It must also be remarked that pyorrhea alveolaris occurs as a parasymphilitic phenomenon. When we take into consideration that the teeth are observed to be all sound before syphilitic infection, and that after the disease has manifested itself it shows its presence; and, further, when systemic as well as local treatment directed to the syphilis causes both to disappear we are certainly justified in concluding that lues is a factor in the production of Riggs' disease. We are unfortunately prevented from making experimental inoculations, or the matter could be definitely settled by inoculating the pus of the pyorrhea in a subject who had never contracted syphilis. Of course, there would remain the possibility of producing nothing but a purulent infection and not a chancre.

The object of the present paper has been to call the attention of syphilologists to the point announced in the title, and observation will, beyond all doubt, lead to a number of valuable ideas and the elaboration of methods, not only for the treatment, but for the prevention as well of this most distressing disease of the teeth. It is for conservatism that we are ever striving, not for radical destruction, and there is no doubt whatever that a little care and study will enable us to save many valuable teeth which are being daily sacrificed on account of a confessed inability to successfully treat the condition known as pyorrhea alveolaris. I am sure no one will more highly appreciate a successful method than dentists, no matter how anxious they may be to construct bridges for their patients.

New Instruments.

AN IMPROVED ASEPTIC ETHERIZING INHALER.

C. FONTAINE MAURY LEIDY, M.D.
PHILADELPHIA.

This cone consists of two parts: The metallic cone, with a depression in the rim of the larger end, or base, to fit snugly over the bridge of the nose (Fig. 1, A) and a brass pretzel-shaped clamp (B) which holds the napkin or towel in position. Both parts are indestructible and can not be injured in any way by heat. The cone has two parallel indentations on either side, which hold the clamp in position as it springs into place.