

use of instruments down the sinuous passage of the urethra with its delicate vascular walls lying in contact with each other is an evil—a small one, or a great one, according to the manner in which they are employed—and should not be used unless there is good reason to believe there is a greater evil present, which they may mitigate or cure; further, that as the passage of an instrument, even on a healthy urethra, is a source of irritation, no one should pass an instrument on another, until he has passed one on himself, for it is obvious that the amount of irritation will depend greatly on the manner in which it is passed, and also on the kind of instrument used. One object should be to effect gradual dilatation with the least possible irritation. With this purpose in view, what instrument or bougie should we choose? I must confess I have modified my views somewhat. In my student days I saw numerous cases of stricture in the surgical wards of the Edinburgh Infirmary, and Sir Joseph Lister—whom I specially followed—was a strong advocate of the rigid instrument. Of these, he had three different sets; one like the ordinary silver catheter, one short and straight set, and one which bears his name—the steel, conical bougie. Seldom did he, with one or other of these kinds, fail to dilate the stricture, however contracted, or peculiar. Strongly prejudiced in favor of the rigid instrument at the outset, experience has compelled me to admit that, in many cases, much may be done by flexible bougies; further, I think that in all cases they should be given a trial first. As to the particular pattern of flexible instrument that is most useful, I cannot speak positively. I do not know any general rule that should govern, each case must be judged separately on its merits, the quality and site of the stricture being considered. At one time the English pattern, with its special quality, viz.: that when heated in warm water, and given any required curve, then plunged into cold water, that curve will be maintained—will be useful. On other cases it is easier to pass the French pattern, which is extremely flexible, and has a tapering point, with, or without a bulbous end. Probably, with the flexible ones we are more likely to succeed in strictures of recent origin that have not been irritated much, and in which the amount of inflammatory induration is not great nor firm. Failing with the flexible ones, I next try the rigid instru-

ments—either the catheter pattern, or the conical, silver-plated steel instruments—using these last with great gentleness, remembering that I possess in them a powerful factor for good, when properly and discreetly used, but an equally potent factor for mischief, if carelessly used or abused. I find I need myself to continually remember this, for one's patience is at times severely taxed in difficult cases, due either to extreme narrowness, or some complication of false passages or other like obstruction—cases where after trying methodically, patiently, and gently, we find the instruments decline to enter, then the temptation is to use just a little force in what we might call the anatomical urethra, and with disastrous results.

How much should we endeavor to do at one time? As a rule, I think that as soon as we reach a size that is firmly grasped we have done enough for one day, and yet cases not infrequently report to us at the hospital that surgeons try and do pass instruments day after day for a lengthened period.

As to the lubricant to be used, I think few surgeons in the present day would use one that does not contain a germicide or antiseptic in some form, for the evidence is so greatly in favor of the view that decomposition of urine is due, in all cases, to the introduction of microscopic organisms from without, and that these organisms find their way into the bladder frequently by instruments introduced by the surgeon. If introduced, the consequences of putrefaction extending to the kidney are so grave that the surgeon who neglects to use them incurs a heavy responsibility.

I have tried cocaine as a local sedative to overcome the painful and disagreeable sensation during the passage of instruments, and also to thereby lessen the instinctive muscular spasm so produced. I find it acts very satisfactorily. Half a drachm of a four per cent. solution injected into the urethra, and held there some minutes, unquestionably facilitates the introduction of instruments. In one case, I am sure, it enabled me to pass a small instrument which I am doubtful if I could have done without using it. In another case it reduced much the fever following the use of instruments. In this case the stricture was the result of injury to the perineum by the patient's falling on the wheel of a carriage. An endeavor was made by a surgeon to pass instruments, but without success. Three or four days afterwards he