

show any original plan, as to compare different methods, for the purpose of bringing out a full discussion of the question.

The necessity for any such operation—I mean “bladder tapping”—in any region, simply hinges on two fundamental conditions. 1st. Complete retention. 2nd. The exhaustion of all simpler expedients for the relief of this condition. And here is where the wedge of controversy enters. Although its necessity is admitted by all surgeons in some extreme cases, eminent men differ as to the place of tapping, and just when it shall replace other methods of relieving an over-distended bladder. Dr. Coulson extends the above rule for guidance by advising the operation of anterior tapping in all cases of “engorgement” produced by enlargement of the prostate gland, necessitating the frequent and difficult introduction of the catheter to remove residual urine, thus giving the irritable bladder and prostate perfect quietude.

The main causes of complete retention are, spasmodic and organic stricture of the urethra, occlusion of the same by impacted calculus, traumatic injury, enlarged prostate gland, or malignant disease. The two latter supply nearly all the cases demanding the operation in question. To relieve a patient in such distress, after thoroughly manipulating with catheters of different sizes and kinds, combined with such adjuncts as opium, chloroform, hot baths, etc., the honest and anxious surgeon, in the face of failure, will ask the question, “What next?” In answer, if we can introduce a filiform bougie, perform Symes’ operation called “external division”; if not, we have “external urethrotomy” at our command, called perineal section by some, cutting without a guide.

Again, we have forcing the stricture with a silver catheter, now obsolete; and many other methods only deserving a passing notice, such as cutting out the stricture, Dupuytren’s vital dilatation, Wakley’s sliding tubes, Arnold’s fluid pressure, internal use of caustics, electrolysis, etc. Then, again, we can tap the urethra directly behind the stricture, if sacculated or distended with urine—this method was strongly advocated by Profs. Liston and Guthrie—a difficult operation, save in the condition of urethra as above, and one at present very seldom resorted to. Any successful operation on the urethral tract, when at all practicable, is the best, as the result is more likely

to be permanent; and to save time, it is sometimes advisable to give temporary relief to the patient by immediate aspiration. All the foregoing methods of relief having failed or proved unsuitable to the case, and we wish to establish a new outlet for some days—nay, it may be some months, or even years—what shall and must be done? Tap the bladder, and do it anteriorly above the pubis. I advocate this outlet as being on the list next to the natural way. Four different methods have been advocated, differing, not so much from their methods of performance as their points of entrance. Two of these have fallen into disuse—the one called “subpubic,” first and last performed by Voillemier; the other, called “pubic,” first performed by Dr. Brander, of Jersey, in 1825. These methods I will not attempt to describe. The most favored positions to-day, are, through the rectum, hereafter called the “posterior method,” and suprapubic, called “anterior method.” The posterior is also called the English method, and was advocated and practised by Mr. Cock, of Guy’s Hospital. The anterior or Irish method, strongly upheld by Fleming, was first performed by Dr. Wiery in 1701 and pronounced the best by Sir H. Thompson, Keys, and many other eminent surgeons, in all cases where a permanent opening is required for any length of time.

*Operation.*—An assistant, long-curved trocar and canula, soft catheter, some tape, adhesive plaster, and chloroform are required. The catheter should be No. 6, and exactly fit the canula, in order to allow of the escape of any mucus, muco-pus, blood or epithelial debris present. After administering an anæsthetic remove the hair from the mons veneris, place the patient in a semi-reclining position, enter the trocar and canula through the integument one inch above the pubis, in the median line, directing its course slightly downwards. During the operation the bladder is supported antero-laterally by the assistant. The tissues down to the bladder should be pierced by the trocar and not incised. This method was first adopted by Mercier, and is, I think, a most excellent modification of the former plan, as it fortifies very much against extravasation of urine, the canula being better, more firmly and securely held *in situ* by the muscular contraction of the bladder wall at the one end, and of the skin at the other. The trocar must be very sharp-pointed; if not, the