Treatment of Urethral Polyp

When a polyp is located by the urethroscope it must be removed by the urethral forceps or, preferably, by the wire snare (Fig. 28),

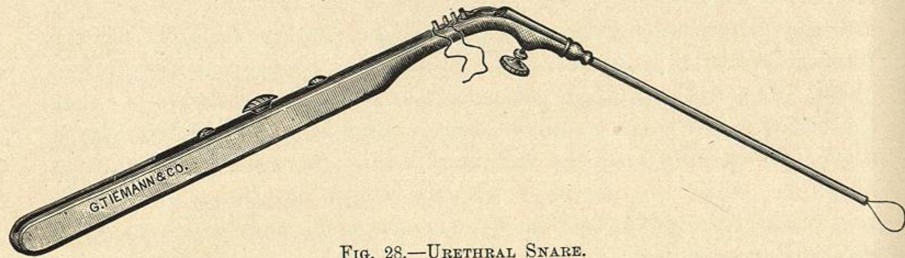

Fig. 28.—Urethral Snare.

or by the urethral curette (Fig. 29), after cocainizing the urethra, lightly cauterizing the raw surface later with a little fused nitrate of

Fig. 29.—Urethral Curette.

silver upon the end of a long probe—all through the urethroscopic tube.

Treatment of Papillomatous Urethritis

The removal of urethral warts may also be accomplished by the snare or the curette, but when growths are numerous and large, lining the urethra, these instruments are too slow, abundant hemorrhage interfering with the work. In such case nothing is better than Oberländer's device, which I have used several times with admirable effect. Cocainize the urethra. Then by the aid of a tube place a large, tightly made cotton tampon behind and another in front, or in the midst, of the condylomatous mass, upon tampon holders (applicators). Now, keep the tube in place, straighten out the urethra, and by rubbing the two tampons back and forth upon each other the soft masses are disintegrated and come away in shreds among the blood-clots. Replace the old tampons with new ones as they become softened by the blood. The amount of friction and the length of the sitting are matters of personal judgment. The blood, at first free, soon ceases to flow. The frictions may be repeated once a week until all the papillomata have been removed, a soothing injection being employed between times. Finally, a few caustic applications upon the points from which the papillomata spring and a course of cod-liver oil with 10-drop doses 3 times a day of the tincture of thuja occidentalis perfect the cure.

Treatment of Folliculitis

An abscess of a follicle discharging within the urethra through an inadequate opening, or the chronic suppuration of a sinus of Morgagni may be detected by its pus-oozing point as seen through the urethroscope. The choice of treatment in such case lies between

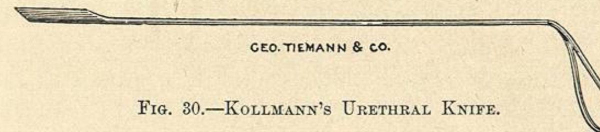

Fig. 30.—Kollmann's Urethral Knife.

an incision with (preferably) Kollmann's urethral knife (Fig. 30) alone, or the injection of the sac or the sinus by means of a pipette or the filiform urethral syringe (Fig. 31) with a couple of drops of the 25% ethereal solution of the peroxid of hydrogen, or by both means combined. The injected solution softens and disintegrates the inflammatory exudation, and leads to closure by contraction of the follicular cavity. The injection may have to be repeated several

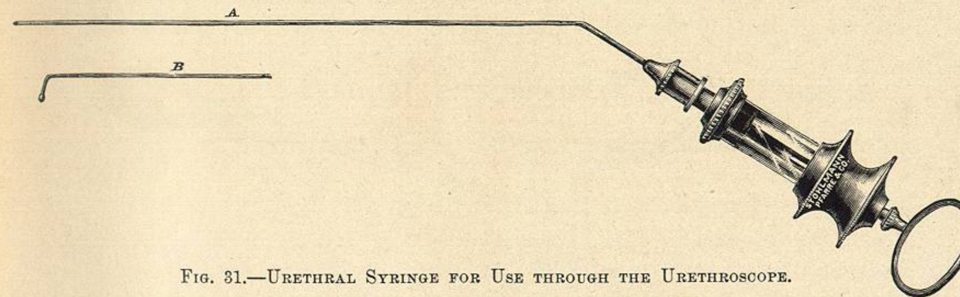

Fig. 31.—Urethral Syringe for Use through the Urethroscope.

times at intervals of a few days, the urethra meantime being irrigated or injected mildly.

All manipulations within the urethra by tubes and instruments should be made carefully and with definite intervals of rest between the applications. Zeal is to be discouraged. The more haste the less speed.

Treatment of Periurethral Abscess and of Folliculitis opening Externally, or both Externally and Internally (Acute Fistula)

All pus formations about the urethra, whether diffuse or contained within a follicular sac, are treated during the acute inflammatory stage on general surgical principles—by rest, protection from friction and injury, moist weak bichlorid or mild carbolized wet dressing under gutta-percha tissue. Incision should not be

made too hastily nor until the formation of pus is pronounced, for resolution often occurs in follicular cases when suppuration seems inevitable. Ichthyol, pure or diluted, seems sometimes to favour resolution. When fluctuation is manifest an attempt should be made with a wire speculum to make an opening from within through the mucous membrane, thereby averting threatened fistula, for the abscess cavity may be better treated afterward from within than from without. This applies to follicular abscess—pus within a sac. When suppuration is diffuse under the skin a cutaneous incision is required, and frequently there will be no subsequent urinary leakage and the abscess may be treated along ordinary surgical lines.

When the abscess has discharged or has been opened, outside or inside, or both, the best results may be confidently expected from the use of pyrozone—the 25% ethereal solution of the peroxid of hydrogen, using a fine-drawn, rubber-capped, glass pipette (Fig. 32) with bent extremity.

By means of this instrument, aided if need be by a wire urethral speculum, a few drops of the solution are thrown into the abscess cavity to destroy the unhealthy granulations. This is repeated after

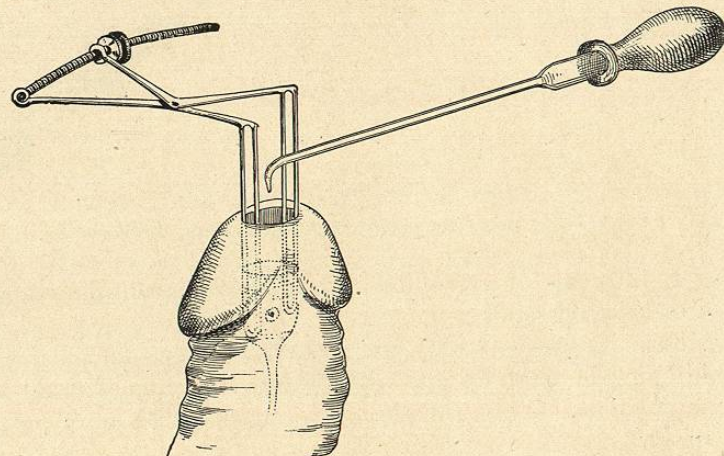

Fig. 32.—Injection of Urethral Fistula.

a couple of days, and then a milder solution (5%) is injected daily, then every second day, until the cavity has filled and healed or the fistula has closed. This treatment should be applied from within the urethra, the internal orifice of the abscess or of the sinus being enlarged for that purpose, if necessary.

If the case is more chronic from the start and the little shot-like or pea-like bodies remain under the skin refusing to suppurate actively, these little tumours may be cut out through a cutaneous

incision. Frequently there is not sufficient communication with the urethra to permit the escape of urine, and the cut heals like a simple incision.

Treatment of Cowperitis

Hot hip baths, absolute rest, poultices, laxatives, and diluents, perhaps leeches, meet all indications in the earlier period of cowperitis. No instrumentation is allowable unless exacted by retention of urine. Resolution even when despaired of may occur, and the knife is not to be thought of until fluctuation is manifest. When a cut is made it should be ample so as to reach by drainage all the various branched pouches of the gland. The abscess cavity must be well stuffed with iodoform gauze to force granulation and closure from the bottom, on pain of leaving a chronic fistula.

When fistula persists after a trial of the pyrozone treatment suggested for folliculitis (p. 130) the only method of cure is to dissect out the entire tract and the granulo-spongy remains of the gland (Englisch).

LOCAL TREATMENT OF POSTERIOR URETHRITIS

This is encompassed by irrigations, instillations, hot baths, douches, and massage.

In a general way it may be said that most cases of very active acute posterior urethritis also implicate or threaten to implicate the neck of the bladder, the prostate, and the vesicles; and therefore they call for repeated very hot hip baths and rest in bed in order to avoid these complications or to meet their requirements, while chronic posterior urethritis does better under hot rectal douche, massage, and perineal counter-irritation.

The Rectal Douche.—The hot rectal douche is very conveniently administered by means of the Chetwood glass rectal tube (Fig. 33), a modification of the Tuttle and Kemp tubes devised for the same purpose.

The figure illustrates the mechanism. The hot water from a fountain-syringe enters the smaller inlet tube, thence flows into an outside sealed chamber from which there is no escape except through the small perforations near the end of the outside enveloping tube. The water flows back again through the central dark tube, which is larger than the combined holes of exit in the external tube. In spite of this facility of exit the water does not flow out of the rectum so readily as it flows in, and every patient has to learn for himself how to manipulate the end of the tube in order to favour the

outflow of the hot water, on pain of giving himself an injection—no very serious matter.

Some patients prefer to sit upon the edge of a chair, the buttocks slightly projecting and the outflow being received into a foot-bath on the floor. Others prefer to get upon all-fours. Most patients soon learn to work the apparatus, controlling the inflow when the outflow ceases, and manipulating the end of the tube without withdrawal. Occasionally a man whose fingers are all thumbs, or whose rectum is hyperesthetic, cannot manage it and has to give it up.

The tube is introduced into the rectum about half its length, and generally two quarts of water, at a temperature (in the bag)

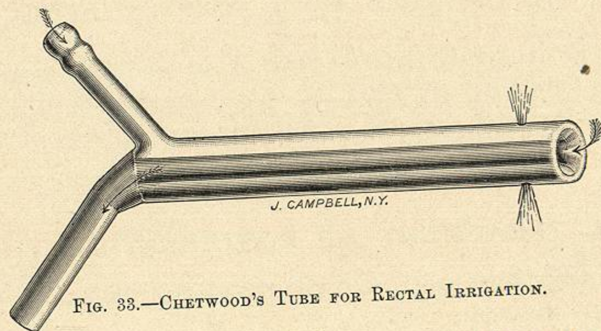

Fig. 33.—Chetwood's Tube for Rectal Irrigation.

of 110° to 120° F., are employed, about ten to fifteen minutes being required for the douche according to the dexterity of the patient.

It is better to use this douche at night just before retiring and to continue it several weeks. Then after rest for a week it may often be resumed with renewed good effect. It is indicated in all local chronic inflammatory and neuralgic conditions of the posterior urethra, the prostate, and vesicles, and has largely replaced the need of that more disagreeable alternative, prostatic massage.

Sometimes in hemorrhoidal conditions, and with oversensitive rectums, the tube does more harm than the heat does good, but this is very rare.

Cold water may be used through this tube in neurotic, neuralgic, and neurasthenic conditions, but generally the hot douche does more good; its effect is sometimes surprisingly prompt and satisfactory.

Massage.—The more chronic the posterior urethritis, the more neuralgic its type, the deeper the inflammation of the gland, the greater is the need for something more than surface applications to the prostatic sinus and douches to the rectum. This need is met by prostatic massage. The patient cannot do this for himself, but a trained nurse may be taught to do it effectively, the only trouble

being a tendency to exercise too much pressure and so to bruise the parts, turning a chronic into an acute inflammation. For massage of the prostate the patient bends forward nearly to a right angle at the hips, holding the knees stiff. The masseur, covering his finger with a thin rubber stall and lubricating it well, inserts it into the rectum, and mapping out the prostate by the sense of touch with gentle pressure and lateral sweeps of the finger, practises the maneuvre of massage during from one to three minutes.

Massage of the prostate, if gentle enough, may be performed daily with good effect. *The use of sounds* is to be deprecated in all forms of posterior urethritis, unless, of course, due to stricture of the membranous urethra, or sometimes where the neuralgic element runs high. In the latter the pressure and internal massage of the sound may do much good.

I have derived no advantage from the application of electricity or of ointments to the prostate per rectum.

Irrigation and Instillation.—*Irrigations* of the deep urethra have been already described (p. 122). They are most serviceable when the discharge is profuse and the inflammation chronic, while instillations are of use to check an acute inflammation or to moderate a mild chronic one.

Instillations are perhaps the most effective means of controlling chronic posterior urethral discharge, and they have also a definite value in chronic anterior urethritis. They are administered by means of the deep urethral syringe (Fig. 34), the long nozzle of

Fig. 34.—Keyes's Instillation Syringe.

which is made of silver with a minute central lumen terminating at the tip of the curve. The syringe part is like a large hypodermic syringe with minims graded on the piston. This syringe is made in one piece, and is cleanly. Its lumen does not corrode, its curve facilitates introduction, the wings indicate the position of the tip and facilitate slow and even depression of the piston. This syringe has been evolved out of the Ultzmann, upon which it is a distinct improvement.

For *anterior instillation* the tip of the syringe, properly lubri-

cated, is introduced into the sinus of the bulb, where a few drops of the solution are deposited. These drops follow the instrument upon its withdrawal, appearing at the meatus and medicating the entire length of the anterior urethra.

For *posterior instillation* the tip of the syringe is inserted well into but not through the membranous urethra. Then the piston is depressed and 20 minims of solution instilled. This flows backward, bathes the posterior sinus, and flows over into the bladder. When the instrument is withdrawn none of the injection appears at the meatus.

In making instillations the bladder should be empty.

Solutions Employed.—The substances most useful for application by instillation are sulphate of thallin, nitrate of silver, protargol, sulphate of copper, glycerol of tannin, and ichthyol.

Sulphate of Thallin.—This astringent, antiseptic, and sedative drug makes a light, straw-coloured, saturated solution at 20% strength. It is best kept in a yellow bottle, but even then it darkens gradually, until it becomes of a rich brown colour, a change which does not lessen the efficiency of the drug.

It is used at 3% strength to commence with, and from that raised to 6% and 12% if it suits. In mild posterior urethritis, especially of the hyperesthetic sort, it often acts like a charm, immediately reducing discharge, and being followed, after the first mild sensation of warmth and smarting, by positive comfort.

It is a good injection to begin with in any case where there is doubt as to the amount of reaction that will follow any local treatment, and it is curative in simple posterior urethritis. To control gonorrheal urethritis, however, stronger applications are necessary.

Sulphate of Copper.—This may be suitably kept in a 10% solution in glycerin to be diluted in water as required. It is generally used in a strength of 1:500 to start with, increased slowly to 1:100 or 1:50 or higher. It burns very little. It is much more suitable for use in the posterior than in the anterior urethra, for what reason I know not. In mild catarrhal posterior urethritis following thallin it often renders distinct service as a mild astringent. It is of no especial value in gonorrheal cases.

Nitrate of Silver.—This drug takes the highest rank in the treatment of chronic posterior urethritis and in acute gonorrheal cystitis. The first effect of an instillation is an immediate sense of heat and smarting in the deep urethra, accompanied by a call to empty the bladder, which may be imperative, even though the patient has just urinated. When this call is responded to the urine is hot and burning and slight tenesmus follows the act. The next urination is less

urgent and painful, and presently order is restored, a sense of comfort and of local anesthesia ensues, and the call to urinate is postponed beyond the habitual limit if the nitrate agrees. Discharge also is promptly checked, or moderated, in successful cases. Nitrate instillations, if very weak (1:2,000), may sometimes be repeated daily, but generally it is better to make them strong enough to be felt (1:1,000 or much stronger), and to repeat in forty-eight or seventy-two hours. The strength of the application may be slowly increased up to 1:50 or higher, and in some cases of neuralgia without prostatorrhea even as high as 5%. It is not wise to use the nitrate stronger than 5% for fear of its caustic action. Even that strength often produces a temporary intense irritability of the bladder with bloody urine. Occasionally the injection induces priapism with pollution the night after its use.

Protargol.—This is a proteid silver salt discovered by Eichengrün and introduced by Neisser, Nogues, and Desnos.

It is less irritating than the nitrate, and may be used much stronger. Three-per-cent solutions sometimes cause considerable and intense urinary stress. Protargol makes a thickish viscid mixture, and calls for a little wider calibration in the syringe employed, and the quantity used is generally greater, 2 to 6 c. c. being thrown in at a single instillation.

The best effects from protargol are obtained in chronic cases, with large instillations commencing at 0.5% and working up as high as 10%. I have used it effectively as high as 40% in one case.

The solution should be freshly made as required for use at each application. The urgent desire to urinate that it occasions is sometimes irresistible, occasionally lasting a couple of days. Other cases tolerate the drug better. The intensity of dysuria does not necessarily increase proportionately to the increase in strength of the solution, but the patient should not be treated brutally, and strong solutions should not be resorted to unless weaker ones fail. All irritation should be allowed to subside before a new protargol instillation is attempted.

In chronic urethritis, even when not gonorrheal, protargol is sometimes a very effective agent. In the congestions existing behind old strictures it has undoubted advantage following the insertion of the sound, and its property of not coagulating albumin permits it to penetrate deeply into the tissues and makes it especially useful in chronic parenchymatous prostatitis.

Ichthyol instillation is occasionally helpful in old chronic posterior urethritis after other means fail. It is well to begin mildly at 2% or 3%, and push, if well borne, even to 20%.

Glycerol of Tannin, diluted from 1 to 5 times with water, is an excellent tonic astringent for instillation in some cases, but it is less useful than the others.

Résumé of the Treatment of Posterior Urethritis

As I have said in another place, chronic gonorrhea is posterior urethritis, and the description of the treatment of posterior urethritis will, accordingly, be adapted to embrace that great multitude of cases whose only symptom is gleet, whether that gleet be due to simple or to gonorrheal posterior urethritis, prostatitis, periprostatitis, or to vesiculitis.

The first requisite is a thorough diagnosis. Inspection of the urine and palpation of the urethra will rule out grave lesions of the anterior canal (any doubts about stricture are set at rest by the first passage of an instrument). Rectal palpation reveals the presence or absence of parenchymatous prostatitis, periprostatitis, and vesiculitis.

Having thus made an accurate diagnosis, a rational treatment may be instituted. The rules of diet, urethral hygiene, and systemic medication must always be enforced, with a few restrictions. The patient must often be prepared to undergo a long course of treatment, and while the local treatment is the actual efficient agent in his cure, he can expect no advantage from this unless he keep himself in as healthy and robust a condition as possible. Hence it is more than ever essential at this stage of the disease that the balsamic administered be entirely compatible with the patient's digestion. When the inflammation has lasted several months, it is often quite useless—the patient's urine being neither too dense nor too acid—to administer any balsamic or alkali. At this stage tonics are far more likely to do good, and, in some of these cases, the stimulation of a little alcohol, which is so deleterious in the early days, may be distinctly beneficial. Simple urethritis may sometimes be cured by alcohol alone, a fact that always gains wide circulation among the patient's friends and encourages them to disastrous efforts in that direction.

Simple Urethritis.—To return to the local treatment: for non-specific posterior urethritis thallin sulphate and silver nitrate are the best local remedies, with an occasional exception in favour of protargol, potassium permanganate, and copper sulphate.

Mild Gonorrheal Posterior Urethritis.—This inflammation usually yields to irrigations of permanganate, beginning at 1: 8,000 or 1: 6,000, and repeated daily at 1: 4,000. Protargol by instillation or irrigation may do better, while in some cases I have often found the admixture of silver nitrate (about 1: 20,000) with the permanganate irrigation the most efficient.

Intractable Posterior Urethritis.—This may be said to exist when the inflammation does not yield in the course of a few weeks to the treatment just mentioned. Such cases are usually complicated by parenchymatous prostatitis, by vesiculitis, or by contracture of the neck of the bladder. One of three courses of treatment is likely to prove efficacious, viz., rectal douche and prostatic massage, hygiene and tonics, or perineal cystotomy.

The douche and massage properly belong to the treatment of parenchymatous prostatitis and of vesiculitis (see below); but the douche is applicable to these cases as well, since there is always a slight implication of the prostatic parenchyma or of the vesicle. The effect of the douche may not be immediately visible to the patient, but several weeks of this treatment, combined with appropriate irrigation, will often work a great change in the patient's urine, even though the individual treatments have no visible effect.

At this stage of the disease it may be advantageous to drop the balsamic and to administer a tonic in its place. And it may be proper to encourage the playing of tennis or of golf. I have even known horseback-riding to effect a cure, in spite of, or perhaps because of, the contusion of the prostate thus incurred. But this is a matter to be decided differently for each case. (I believe bicycles and railroad trains are always injurious.) In selecting a form of exercise the patient's habits, taste, and constitution must all be considered, and the results of the exercise closely watched. If he returns refreshed and exhilarated, the treatment suits him, even though it produce no change in his local symptoms. On the other hand, I have known a desperately chronic case cured by local treatment, rest in bed, and diuresis by mineral waters.

There remain a few cases that none of the above measures can cure. Their proper course is to go away for several weeks to an unaccustomed climate, taking with them an injection (anterior or posterior) to check the discharge. I have seen patients cured when all other means had failed by simply crossing the Atlantic and returning on the same ship, or by a trip to the Adirondacks or to Asheville. They return either entirely cured or in such good condition that it is only a matter of a few weeks of local treatment before they are well.

Finally, the last resort is operation. If there are symptoms of contracture of the neck of the bladder (p. 317) perineal section with drainage is required, and the same treatment may be efficacious in mere chronic posterior urethritis; but it should be reserved abso-