

easily forced into the urethra and allowed to remain in for one or two minutes with the meatus closed. In the majority of cases according as the secretion and sensitiveness of the urethra indicate, the injections are to be increased to two or three times their strength and kept so till they are no longer required. Use may also be made of tannin alone or in combination with alum. Injections composed of drugs such as sulphate of zinc or acetate of lead which do not dissolve but are suspended in water have the disadvantage that the fine powder is deposited and stops the orifices of the urethral glands, and may cause small follicular abscesses. Some days after using such injections, it is observed that cylindrical plugs composed of the precipitate are discharged during micturition. It is well to use only clear and filtered astringent solutions. To prevent painful erections and chordee, it is well to prescribe bromide of potash, lupuline, and keep the bowels freely open.

When the gonorrhœa lasts more than eight or ten weeks, it is called chronic—chronic gonorrhœa consists in this, that spots on the mucous membrane do not become covered over with epithelium, but continue to secrete. Grünfeld considers that occasionally small polypoid excrescences occur when the disease become chronic. The chronic gonorrhœa process is not always confined to the superficial mucous membrane, frequently the deeper layers are involved, and when the deeper layers of the diseased parts show cicatricial changes, rigidity of the urethral wall and cicatricial contraction will take place and unpleasant symptoms follow. To aim at a complete cure, the lumen of the urethra as well as the walls of the same must be made normal. It is useless to employ simply astringents and caustics to bring about the restoration of the parts. The normal male urethra is a soft elastic sheath into which can be passed with ease, a catheter having the calibre of number 30 Charrière scale, the

meatus is usually more or less contracted and may have to be divided before it allows of the passage of so large a sound. In a case of chronic gonorrhœa when the urethra is examined with a thick sound, it is found that the diseased portion is narrowed, and the large sound will not pass at all or only with difficulty. The slight lessening of the urethral lumen or the loss of elasticity of the walls of the urethra cannot be proved with small instruments, still less can it be improved; not only must the inflammatory process on the superficial portion of the mucous membrane be cured, but also the lumen and elasticity of the urethra must be brought to a normal standard. If this latter is not attended to, constant irritation of the peripheral endings of the nerves of the urethral wall results, and there arises after gonorrhœa either a neurosis in the genital region or that moisture of the urethra called false prostaticorrhœa, which appears to be due to the difficult circulation of the blood in a rigid urethral wall; looking at it from this standpoint the treatment of chronic gonorrhœa by means of the thick sound is a *conditio sine qua non*. In many cases sounding alone produces a complete and permanent improvement. The sound cure is carried out in this way, to begin with small numbers and gradually increase them according to the Charrière scale, every day or every other day introduce the next largest instrument and allow it to remain in for a minute, increasing till number 27 to 30 and upwards is reached. If the sounding is discreetly performed it is observed that the secretion soon decreases. If sounding is not sufficient injections can be employed in addition, making use of them immediately after sounding.

In these cases the bougies and also the other instruments should be rubbed with glycerine and not with oil, because when the urethral walls are covered with fat, watery solutions of astringents or caustics do not come in direct contact with the mu-