

HYPERTROPHY OF THE PROSTATE GLAND.

A Clinical Lecture delivered at the Montreal General Hospital, May 15 1890, by Dr. Francis Wayland Campbell, Dean and Professor of Practice of Medicine, University of Bishop's College.

GENTLEMEN,—The patient, J. F. L. now before you, is about 58 years of age and with more than the average intelligence of his class. He dates his trouble to about five years ago—when he noticed a more frequent desire to urinate during the day and night, and the act was accompanied by a burning sensation. This continued for some six months—when he consulted a medical man, under whose care he was for a long time, but did not get relief. He then treated himself, by sweet spirits of nitre, which seemed beneficial for a time, but one day about two years ago catching cold, by a wetting, he had retention of urine. Since then he had regularly used the catheter several times a day and several times at night, though he can pass a small quantity of urine. He has been in the habit of using an ordinary gum-elastic catheter, and upon several occasions, its introduction has caused a severe chill, followed by fever, necessitating his keeping his bed for some days. The specimen of urine which he brings with him is cloudy and contains much mucous, and is very acid. On examination per rectum I find that the prostate gland is much enlarged, which is the primary cause of all the man's trouble. I will place him on a mixture containing bicarbonate of potash, tincture of hyocyamus and camphor mixture, and under a suppository of 2 grains of exgotine and five grains of iodide of lead with cocoa butter to be introduced into the rectum every night on going to bed.

A variety of hypotheses have been advanced to account for enlargement of the prostate gland, but the consensus of opinion is that none of them cover the ground. Some believe that it is a disease of advanced life. Although it is seldom met with before fifty, yet taking a large number of men at that age and over, their prostate will be found normal. The condition is therefore generally believed to be a pathological one and not physiological. There is a strong analogy between the muscular tissue of the uterus and of the prostate, and both, after middle life seem to have a tendency to develop fibrous tumors, for it is the muscular tissue and not the glandular tissue of the prostate, which in the vast majority of cases is enlarged. The extent to which the gland enlarges varies. It has been met with the size of a man's fist or a small orange, but this is rare. Its enlargement does harm mechanically, and causes lesions in other parts. The immediate result is a deviation in the direction, and as a rule a diminution in the size of the prostatic urethra. As a result of the enlargement there is an obstruction to the flow of urine from the bladder, and this obstruction often

results in retention, which becoming great, causes paralysis of the bladder from over-distension.

A catheter with an ordinary curve must strike against this obstacle, and refuse to enter the bladder. Any attempt at forcing can only result in mischief, which may be followed by serious consequences at the time or troublesome consequences even after. The obstruction to the free flow of urine, calls for an increased effort on the part of the bladder to force it out. This causes hypertrophy of its wall, but the bladder muscles, at its base, are generally in a state of congestion, and are unable to contract sufficiently to bring the flow of the tissue, above the level of the obstruction at the mouth. In consequence, after each urination there is left behind a small quantity of urine, which does not give rise to any symptoms. It becomes mingled with the fresh urine entering the bladder, is partially passed off, and replaced by fresher fluid. After a time, however, the mucous from the congested mucous membrane around the base of the bladder, being in part retained in the residuum, acts upon the urine setting up decomposition of uræa, and liberate carbonate of ammonia. This irritates the mucous membrane of the bladder, increases its congestion, which produces a new supply of mucous, and thus the mischief goes on increasing, which is helped by the natural acidity of the urine. The mucous membrane at the outlet of the bladder becomes hyperæmic and thickened, and the obstruction to the flow of urine is increased. In this way from month to month, the amount of urine remaining undischarged increases, and the bladder gets less and less able to empty itself. Finally retention comes on, generally excited by a chilling of the feet and legs which produces an active inflammatory congestion to an already existing enlargement, this congestion being sufficient to shut up the urethra completely. This hyperemia may subside in a few hours, if the patient is kept warm, and he may thus be able to void his urine. If not, surgical interference is necessary and a catheter is introduced or the accumulation may go on to overflow. This stretching of the bladder, weakens its muscular fibres, and the consequence very often is, that the organ is left in a state of atony. Although the bladder may continue to perform its function, expelling the excess of urine above the residuum, the amount of residual urine is greater, and the power of expulsion less. The congested mucous membrane around the vesical neck, and in the prostatic urethra is kept irritated by the partly decomposed urine, so that it requires but a slight cause to bring on another retention each such attack leaving the bladder in a more helpless condition. Another result of retention is the occasional development of sacculi, which helps much to increase the mischief. The ureters often become involved. They get dilated and congested, as also does the pelvis of the kidneys, and at last there is excited