

sponge. The two extremes may be classified as the fibrous and adenomatous classes, while between these will be found cases with all degrees of hardness. The rate of growth is a variable quantity. The entire gland may increase symmetrically in size, or one individual part may become enormously hypertrophied entirely at the expense of another. The adenomatous form increases most rapidly, while the fibrous—though slower in growth—yet produces symptoms of a serious nature at a much earlier period in the disease than the adenomatous variety.

Section of the enlarged prostate shows microscopically but an unorganized mass of glandular tissue without ducts and without arrangement. This may occur in either lobe singly, but more commonly it is found in both combined. Apart from this it may sometimes have its origin in one of the detached glands in the sub-mucous layer of the urethra. From whatever may be the original focus, it spreads along the line of least resistance, which is upwards toward the bladder.

The physical appearance of the hypertrophied prostate will depend entirely on the relative amount of fibrous and glandular tissue. Where the glandular tissue predominates, the growth is likely to be rapid and may attain an enormous size. In consistence it is likely to be soft and elastic. Should the fibrous tissue predominate, the growth will be much more slow, the gland will be hard and nodular, and the resistance to the passage of urine will be great.

Acute retention of urine is, in most instances, due to congestion of the mucous membrane around the neck of the bladder. This only occurs when other conditions than simple fibro-adenoma are present. In these cases the enlargement is complicated by venous congestion and septic inflammation of the bladder, which extends into the urethra and which is co-existent with thickening of the urethral mucous membrane, with thrombosis, and many times with extravasation of blood.

Prostatic tumors, so-called, so long erroneously believed to be analogous with uterine fibroids, are caused by one part increasing in size more rapidly than those around it. They vary greatly in size, and on a small scale are present in nearly every case of hypertrophy. They may occur in any portion of the gland, and may be isolated or grouped together in bunches. These adenomatous masses appear to be constantly under pressure, as shown by the fact that, when cut across, they protrude beyond the level of the surrounding surface.

The walls of the blood-vessels traversing the prostate are invariably altered as a result of the glandular hypertrophy, the main change being a fibrous thickening of the intima and the media. This change in the blood-vessels has frequently been noted also in the kidney.

The urethra is always affected in enlargement of the prostate, and its length is probably always increased. In the lower part of the pros-