haps the shaft of the instrument will have to be carried well back of the median plane of the body before it will enter; perhaps it will not pass at all. No attempt must be made to push the instrument in. It is pocketed in the prostatic sinus behind an organic obstruction. Force may overcome the obstacle, but it may tear a tissue already diseased and most resentful. The result may well be a complete retention, a sharp chill, or a violent cystitis. *The only force allowable*—and that should not be violent—*should be directed to depressing the handle of the instrument.* The shaft pivots at the membranous urethra, and, as the handle is depressed, the beak rises, the point of the instrument enters the bladder, and, as soon as the heel reaches the height of the orifice, it slips in easily enough with a slight jerk. If this maneuvre fails, the attempt must be given up, with the consolatory thought that if the bar is so high the *bas fond* is, undoubtedly, too deep to be thoroughly explored for stone.

If the instrument slips in, the bladder is to be quickly searched for stone (p. 436). The projection of muscular trabeculæ into the bladder may often be appreciated, and, finally, in withdrawing the instrument, it will hook into the *bas fond* if its beak is turned downward. With the instrument held in this position, a finger in the rectum will appreciate the thickness of gland tissue intervening between it and the urethral instrument. If the *bas fond* is deep a small stone readily escapes the searcher.

Cystoscopy is rarely necessary, and often injurious.

Differential Diagnosis

The distinguishing features of inflammation, abscess, and tuberculosis, are too characteristic to require rehearsal here. When there is a diffuse, non-inflammatory enlargement of one or both lobes of the prostate, as felt by the rectum, the diagnosis rests between hypertrophy and cancer. When there is little or no lateral enlargement, but considerable urethral obstruction, the diagnosis rests between hypertrophy of the prostate and contracture of the neck of the bladder. In neither case is the differential diagnosis always possible.

Malignant Disease.—When a large, hard, ill-defined tumour is felt through the anterior rectal wall, the surgeon attempts to delineate the prostate. If that organ can be made out below and distinct from the mass, it is a cancer of the bladder or a pericystitis, not a tumour of the prostate. If the prostate is involved in the disease, and the mass is apparently fast to each side of the pelvis, and extends upward indefinitely, there is a question of cancer of the prostate or of periprostatitis; there is no question of hypertrophy. But if the finger can be swept across the tumour and into a deep

sulcus on each side of it, and the enlargement is evidently confined to the gland itself, there may still be malignant degeneration. A single hard tumour the size of the ball of the thumb is extremely suggestive of carcinoma, whether the remainder of the prostate be hypertrophied or not. But in some cases all the signs and symptoms are those of hypertrophy of the prostate until the rapid advance of the disease betokens its malignant nature.

Contracture of the Neck of the Bladder.—If cancer and hypertrophy of the prostate are sometimes confounded, contracture of the neck of the bladder and hypertrophy of the prostate are, one might say, always confounded. Among the innumerable tomes, monographs, and pamphlets that appear month after month, torturing every aspect of the "old man's disease," I have not found one that makes the clear clinical distinction between retention due to contracture of the internal sphincter and retention due to hypertrophy of the prostate gland. This distinction is vital as regards prognosis and treatment, and the key to the situation is this: *When there are symptoms of prostatic retention without any hypertrophy of the prostate, the essential lesion is a contracture of the neck of the bladder.* The anomaly of prostatism without hypertrophy of the prostate, of inveterate cystitis cured by perineal section, of hypertrophied prostate cured by Bottini's operation—all these have been commented upon again and again; but since the days of Mercier and Civiale only faint glimmers of the truth have penetrated the writings on this subject. Suffice it to say here that, while contracture of the neck of the bladder complicates disease of the prostate, from the gonorrheal inflammation of youth to the hypertrophy of old age, and is present in many cases of long-standing hypertrophy, the diagnosis of contracture without hypertrophy may be passed upon all those who, with the symptoms of prostatism, have no increase in the urethral length and no hypertrophy appreciable by rectal touch (p. 317).

Prognosis

Hypertrophy of the prostate is not of itself a mortal malady. The tumour is benign and rarely undergoes malignant degeneration. (*Cf.* Albarran and Hallé.[1]) Yet it does not get well spontaneously although sufferers from it may have long intervals between exacerbations of the disease—and it is mortal by the retention and the inflammation that it causes.

The prognosis of the disease is bad. Its progress is slow; it may be controlled for many years (the prostate itself ceases to en-

[1] Guyon's Annales, 1900, xviii, 113, 225.

large at or about the age of sixty-five), but it slowly progresses. After the bladder has once become chronically inflamed it does not recover unless the obstruction is removed. After the kidneys have become inflamed or sclerosed they never return to their normal state. With each year sapping the sick man's powers of resistance his prostate gets the better of him in the end.

The surest criterion of prognosis is the patient's amenability to palliative treatment. He is safe so long as his symptoms can be controlled by palliative means. Systematic catheterism and irrigation of the bladder may hold the disease in check for years; but when they fail there is nothing left but operation or death. The post-operative prognosis will concern us later.

The common cause of death is urinary toxemia or septicemia through kidney insufficiency. In certain cases, acute retention, violent cystitis, or local inflammations have much to do in wearing out the patient.

CHAPTER XVIII

PALLIATIVE TREATMENT OF PROSTATIC HYPERTROPHY

The treatment of hypertrophy of the prostate is palliative and radical. Palliative treatment will be described first, while the detail of prostatic hygiene, which should be the background of every other treatment, demands preliminary consideration.

PROSTATIC HYGIENE

The prostatic man resembles the menstruating woman in that any exposure or overdoing reacts promptly upon his pelvic organs. "Beware of congestion" must be his motto, and upon this he must mould his life. He must avoid all exposure to cold: draughts are dangerous, wet feet fatal. His clothing, especially his underwear and footgear, must be regulated by the thermometer. Light exercise and fresh air are beneficial; but any excess, physical, mental, sexual, or alcoholic, must be avoided. Of alcoholic beverages, he may drink whisky, gin, and white wine in moderation; but no beer nor champagne. The stomach must not be overloaded. "*C'est souvent en lui souhaitant bonne fête*," says Guyon, "*qu'on détermine chez un vieillard prostatique sa première rétention.*" The diet must be both light and laxative, for a torpid bowel threatens infection as well as congestion. Meats should be largely replaced by vegetables and cereals, milk by buttermilk, tea by coffee or cocoa, red wine by white. Fruits should be employed circumspectly, as their acidity may do more harm than their laxative qualities do good. Finally, the patient must keep his urine bland by drinking plenty of water, using alcohol little or not at all, eschewing all beer, ale, and champagne, and cutting off all rich and fried foods and such special articles as strawberries, asparagus, and grapefruit. If he has been a high liver these dietary changes will have to be worked out gradually, since too great insistence on them all at once will only make him disobey instructions.