CHAPTER III

TUMOURS OF THE PENIS

Gumma.—Gumma occurs in the prepuce, the urethra (very rarely), and the corpora cavernosa. In the first two localities it may be mistaken for tuberculosis or cancer. The history, the influence of mixed treatment, and, if necessary, the examination of a section of the growth determine the diagnosis. In the corpora cavernosa it resembles circumscribed fibrosis, but is deeper, less cartilaginous, and almost always occurs in the posterior third of the organ (Zeissl). Gummata never increase in one direction while healing in another, and they are likely to break down and soften. The so-called relapsing chancre is a gummatous deposit in the scar of the initial lesion. The most important feature of preputial gummata is the frequency with which epithelioma originates in their scars.

BENIGN TUMOURS OF THE SKIN AND CONNECTIVE TISSUE

Cysts.—Mucous, implantation, and sebaceous spots occur. The last originate in the sebaceous glands of the skin or in Tyson's glands. Cysts occur almost always in the prepuce and are readily enucleated. (*Cf.* Gerulanos.[1])

Neoplasms

Lipoma, adenoma,[2] and angioma have been described. They are rare, and their removal is a question of judgment involving a recognition of the function of the penis as an intromittent organ, and the possible loss of this function from the formation of a cicatrix.

Papilloma.—More important because of their frequency are the papillomata (*warts or vegetations*) of the penis. They are commonly denominated *venereal warts*. This title, however, is not exact, since there is no necessary connection between them and any venereal

[1] Deutsche Zeitschr. f. Chir., 1900, lv, 326.
[2] Morrow's System, 1893, i, 58.

disease as a cause. They are nothing more nor less than papillary overgrowths, often highly vascular, and composed in large excess of epithelium. They may be prominent and pedunculated, or flat, and growing from a considerable surface. They are nearly always multiple. They are caused by the contact of irritating fluids with a membrane of naturally delicate texture, or simply by lack of cleanliness. Consequently the most favourable condition for their production exists in gonorrhea, in balanitis, or when mucous patches occupy the cavity of the prepuce. Their favourite seat is just behind the corona glandis, but they are also encountered anywhere within the cavity of the prepuce—at its orifice, upon its cutaneous surface—or even within the urethra. They are found also upon the scrotum, and frequently around the anus. They are, when numerous, bathed in a fetid, puriform secretion, and may grow large enough within the prepuce to cause phimosis. They occur upon young children, and are found in their greatest luxuriance within and around the vulvæ of pregnant women affected with irritating discharges—discharges not necessarily venereal in any sense. Implantation warts also occur after circumcision.

Diagnosis.—Warts should be differentiated from mucous patches and condylomata by the typical appearance of the syphilitic lesions and the accompanying symptoms of the disease.

From commencing epithelioma the diagnosis may be extremely difficult if the wart is a flat one and the base a little dense. When in doubt examine a snipping under the microscope, and if it appears benign, treat it as such, but remove it in any case. If it recur, and the patient is over fifty, it is safest to exsect it as though it were epitheliomatous, whatever the findings of the pathologist.

Prognosis.—Unless kept scrupulously clean, warts sometimes ulcerate, and they may even suppurate, light up suppurating buboes, and even cause gangrene of the penis. Simple cleanliness, on the other hand, often causes them to atrophy.

Epitheliomatous degeneration may take place, and is always to be feared. The implantation warts are especially liable to hypertrophy and become *horns*.

Treatment.—The observance of cleanliness alone often causes vegetations to shrink up and disappear. In any case this is the first essential to the success of any course. In case vegetations are complicated by balanitis, treatment of the latter will often at the same time triumph over the warts. Perhaps the most valuable local application is a 10% mixture of salicylic acid in acetic acid. This forms a chalk-and-water mixture of which the moist chalk is smeared over the warts. One or two applications cause the growths to wither away

and drop off. Relapse does not seem to occur after this treatment. If they persist, however, or constitute the main disease, all the pedunculated growths may be removed with curved scissors, and the surface from which they grow cauterized with nitric acid or any other escharotic. The flat growths may be disposed of by the application of nitric acid, at intervals, until the base from which they spring has been destroyed. Where the number of vegetations is too great to allow of their treatment *seriatim*, attention to the general health, cleanliness, and local dusting with calomel is the proper course. This plan, so efficacious in treating condylomata and mucous patches about the anus, is particularly applicable if the vegetations are surrounded by an excess of moisture.

Horns.—Horny growths may spring from the glans or the integument. They begin as warts and are very prone to epitheliomatous change. Brinton,[1] of Philadelphia, has described a curious case and collected others from the literature. Baldwin [2] and Bruce Clark [3] mention others.

Benign Tumours of the Erectile Bodies

The benign tumours of the erectile bodies of the penis are four: *circumscribed fibrosis, enchondroma, osteoma, and calcification.* The first is comparatively rare, the others extremely so.

Circumscribed Fibrosis.—I have come to prefer this name for the malady heretofore usually known as *chronic circumscribed inflammation of the corpora cavernosa*, for the condition is a fibrosis, not an inflammation, and though it usually affects only the corpora cavernosa, the corpus spongiosum as well is sometimes involved. This malady was described in the first edition of this treatise upon a foundation of 5 typical cases which I had seen with Dr. Van Buren, and which were there detailed. Since that time I have seen at least 100 new cases, but I have learned few new features of the disease. I have but rarely seen a case become entirely well.

Though apparently observed by De Lapeyronie,[4] it was first accurately depicted by Kirby,[5] who concluded that gout was the efficient cause. Cruveilhier [6] first announced the affection to be a fibrous transformation of the erectile tissue. Marchal [7] and Verneuil [8] observed the disease in diabetics, and many others have reported individual cases.

[1] Med. News, 1887, li, 141. [2] *Ibid.*, 449. [3] Lancet, 1894, i, 219.
[4] Mem. de l'acad. de chir., 1743, i, 423.
[5] Dublin Med. Press, 1849, xxii, 210. [6] Anat. Path., iii, 594.
[7] De Calvi. Les accidents diabétiques, 1864, ii, 82.
[8] Bull. de la soc. de chir., 1883, viii, 826.

The affection comes on insidiously, without apparent cause, although the patient sometimes ascribes it to local injury. The first symptom is a bending or a slight pain at a certain point in the penis when the organ is erect. Examination detects a hard, flattened mass with sharply defined margins, occupying the substance of one or both corpora cavernosa near the surface, and feeling like cartilage —elastic, springy, not as bony as a calcareous plate. The corpus spongiosum rarely participates in the disease. The penis bends during erection at the affected point, and along the edge of the hardness a little pain is experienced. This indurated mass, which is usually irregularly oval in shape, with often a projecting line of hardness towards the root of the penis, may remain stationary for an indefinite period; or it may progress slowly backward or forward, sometimes retaining its size and shape, sometimes growing larger, sometimes smaller.

A slight tenderness is perhaps felt along the line of advancing induration, and moderate uneasiness is usually produced by pressing the induration between the fingers, the same feeling as that experienced during erection. The seat of election is the dorsum of the penis forward, the patch spreading equally around each corpus cavernosum, and being usually more blunt forward than posteriorly. Sometimes a single patch is found laterally in one corpus cavernosum, not reaching the dorsum, and there being no companion on the other side. The disease occurs after middle life. The patients are usually healthy, and certainly are not uniformly subject to any diathetic disease, although more patients are noticed as having had gout or rheumatism than any other malady. Gonorrhea, syphilis, stricture, bear no possible etiological relation to this malady, and treatment by mercury and iodid of potassium is absolutely negative. The integument of the penis is in no way involved. The malady appears to be a chronic thickening of the sheath and a portion of the underlying erectile tissue of the corpus cavernosum, which thickening appears to obliterate the meshes of the erectile tissue and prevent their distention with blood during erection of the rest of the organ.

Morbid Anatomy and Etiology.—Verneuil first suggested, correctly, I believe, that the condition was non-inflammatory and analogous to the contractions of the palmar and plantar aponeurosis encountered among gouty subjects. He thinks the cause is gout, and is interested in the fact that 3 out of 4 of his cases were also diabetic. Trélat, at the same meeting of the surgical society, reported that he had seen 2 cases, Monod 1, and Le Fort 3, none diabetic. I do not know that the urine was tested for sugar in the

earlier cases seen by Dr. Van Buren and myself. None of the later cases examined was diabetic, so far as I know. Some of them had the gouty diathesis, but this cannot be affirmed of all. Tuffier,[1] in an exhaustive article, while omitting a number of cases of which I have record, has collected 35 cases, in which no diathesis is noted in 9, 15 were gouty, and 11 diabetic. The malady being far more common in advanced life than at any other time, he searched patiently among 2,500 old men at Bicêtre and Ivry without finding a single case, and mentions Cruveilhier and Ricord as having been equally unsuccessful in trying to find a case for dissection; but, after his article was finished, one of these nodosities was cut out by Verneuil (October 25, 1884), and Leloir reported that it was composed of a tissue analogous to that of keloids—embryonic cells in clusters tending to fibrous transformation, few vessels, with fibrous planes resembling cicatricial tissue.

Tuffier and Claude [2] report one specimen as a chondrofibroma of the sheath of the corpora cavernosa. Chetwood's case of osteoma of the penis proved to be in part fibroma, in part true osteoma.

From these scant records and the clinical data it may be definitely asserted that this condition is a fibrosis beginning in the sheath of the erectile bodies, tending to extend to the erectile tissue, and perhaps occasionally progressing to chondrification — very much more rarely to ossification. A distinction that may be made between these patches and true enchondroma and osteoma is that, while the former may diminish in size and disappear in one place while growing in another, the latter never undergo these retrograde changes.

Prognosis.—The prognosis is negatively good in that the fibrous mass never ulcerates or degenerates into anything malignant, may get spontaneously better, even possibly well, or may, and sometimes does, develop backward until it gets so low down towards the root of the penis that it no longer seriously interferes with upright erection. I have seen more than one patient who, at one time being debarred from sexual intercourse, has by a shifting of the position of the induration again become potent. I have met one person with a distinct softish plaque of some size, of which he had no knowledge whatever until I called his attention to it. The distinction between fibroma and enchondroma can only be made pathologically; clinically it is unimportant. The tendency to ossification manifests itself so rarely that it is a negligible quantity.

Treatment.—An effective treatment of this singular malady is yet to be discovered. Thus far time only has seemed to help it, while

[1] Guyon's Annales, 1885, July and August. [2] *Ibid.*, 1894, xii, 838.

blisters, oleate of mercury, tincture of iodin, with mercury, the iodids, and electrolysis, have uniformly failed. Perhaps alkalin or anti-gouty remedies may have some beneficial effect. I always try them, and have thought they encouraged resolution in some cases. Yet in others they are absolutely inefficacious. Excision only replaces the fibrosis by scar tissue.

Calcification and Ossification.—Both of these conditions are usually, probably always, secondary to fibrosis, or enchondrosis of the erectile bodies. Calcification of small patches is quite rare, ossification is even more unusual. Cases of this latter condition have been reported by von Lenhossek,[1] Demarquay,[2] Porter,[3] Jacobson,[4] and Chetwood.[5] In Chetwood's specimen certain spots were simply fibrous, others were cartilaginous, while the bulk of the growth was true bone. Most of these specimens, whether calcified or ossified, if carefully examined, would probably show some trace of these different stages of development. To compare penile osteoma with the bony development normal in the penes of certain monkeys is scarcely logical.

Prognosis.—Calcification or ossification may cease after more or less of each corpus cavernosum has suffered, or it may involve the whole organ pretty generally. The hard masses can be distinctly felt. Sexual intercourse may be seriously interfered with, if not prevented altogether. Under these circumstances the patient is often driven to thoughts of suicide, urged on by that morbid depression, which, in the male, always accompanies a sense of sexual incapacity, be that incapacity fancied or real.

Treatment.—Medicine holds out no hope to the sufferer. If the disease has come to a standstill and the deposit is superficial and small, it may be removed with the knife—an operation which has been performed with success by Regnoli, MacClellan,[6] myself, and others.

MALIGNANT NEOPLASMS OF THE PENIS

The primary malignant new growths of the penis are *sarcoma* and *epithelioma*. The former is very rare. It arises from the erectile bodies, usually the corpora cavernosa. The latter, much more common, begins on the glans, on the prepuce, or in the urethra. Epithelioma of the urethra will be considered with the other diseases of that canal.

[1] Virchow's Archiv, 1874, lx, i. [2] *Op. cit.*, p. 354.
[3] N. Y. Med. Record, 1882, 270. [4] *Op. cit.*, p. 683.
[5] J. of Cut. and Gen.-Urin. Dis., 1899, xvii, 231.
[6] Velpeau. Nouveaux éléments de méd. opért., 1839, iv, 336.