CHAPTER XXVI.

TUBERCLE OF THE UTERUS.

TUBERCULAR disease of the uterus may most fitly be considered before cancer. The uterus does not seem to be peculiarly prone to this disease, and when it is so affected, other organs or structures are almost invariably affected at the same time. The development of tubercle in the uterus has been especially observed to date from labor. This circumstance suggests the hypothesis that the active physiological process of gestation and labor augments the predisposition of the uterus to become the seat of tubercular mischief, and thus determines or directs any constitutional tendency that may exist to this organ. There are other facts which support this hypothesis. Thus I have often observed that the calcareous degeneration of the placenta, a condition which chiefly affects the decidua —a true uterine structure—is most liable to occur in strumous or tubercular subjects. When tuberculosis appears after child-birth, it is developed on the placental site.

This sequence of tubercular disease of the uterus upon labor is illustrated in a preparation in Guy's Museum (2261[74]), taken from a woman aged twenty-four. She had general peritonitis of a chronic character for several weeks, commencing after labor, from which it was thought to have proceeded. It was found, however, to be tubercular. The interior of the uterus was filled with tuberculous matter; the cervix being unaffected.

The disease has, however, been observed in girls who have never been pregnant. The researches I have made dispose me to conclude that tuberculization of the uterus is very rare before puberty.

Mr. Hutchinson exhibited to the Pathological Society (*Path. Trans.* vol. viii.) the uterus of a girl aged fifteen. It was distended into a cavity which contained two drachms of fluid resembling ill-formed pus, only more glairy and adhesive. There was no evidence of ulceration of the mucous membrane, nor any deposit in the parenchyma of the uterus. "I was inclined," says Hutchinson, "to regard it as illustrating the exudation of tuberculous material on the free surface of the lining membrane, by which chronic inflammation, ending in the effusion of an admixture of pus, had been caused." There was tubercle in liver, kidneys, lungs; and she died of albuminuria. Boivin and Dugès figure (pl. xvi.) a specimen of tubercle in the right tube and right broad ligament, taken from a girl aged sixteen.

Tubercle appears on the mucous membrane, and especially on the posterior wall, in the form of gray granulations, which gradually crowd together, and extend into the Fallopian tubes, and sometimes into the cervix. Sooner or later softening sets in. The mucous membrane, beset with tubercles, is changed to a yellow-cheesy pulpy layer, underneath

which the tuberculization attacks the uterine parenchyma, so that at last the uterine wall exhibits a similar change for a considerable depth. This cheesy mass suppurates, and is thrown off in lumps of variable size. The discharge is sometimes obstructed by closure of the os uteri, when it collects, distends the uterus, and forms hydrometra. The tuberculization and suppuration commonly are bounded by the os uteri internum. They rarely overstep this spot. Rarely also is tuberculization primary in the cervix. When it occurs there, the suppurative process makes deep excavations in it.

Destruction of tissue may follow upon ulceration; and even perforation may take place through the uterine wall or the Fallopian tubes, leading to effusion into the peritoneal cavity. The tissues of the uterus may be so disorganized, that rupture may ensue if pregnancy exist, as in a case related by H. Cooper (*Medical Gazette*, 1860); and even in the case of the non-pregnant uterus, as in an example related by Guzzo (*Archives Gén. de Méd.* 1848).

Tubercular degeneration of the uterus is almost always attended by a similar condition in other organs. But in not a few cases the disease seems concentrated in the uterine mucous membrane, so that the name "*phthisis uteri*" might fairly be given to it. When this is the case, ragged irregular ulcerations form on its mucous surface; constant purulent discharges, at times streaked with blood, occur. Some enlargement of the organ is common. Severe pain is a frequent symptom. The disease, as may be supposed, is very intractable.

Sometimes the whole genital mucous tract is affected. The Fallopian tubes are commonly implicated. Indeed, Rokitansky and others affirm that it begins in the tubes. When the tubes are affected they become enlarged, distended, tortuous, forming elongated tortuous, sausage-like tumors on either side of the uterus, resembling in shape the tubes affected with dropsy, but differing in being more solid. This condition of the tubes is well seen in Fig. 166, from Carswell; but often the enlargement is considerably greater.

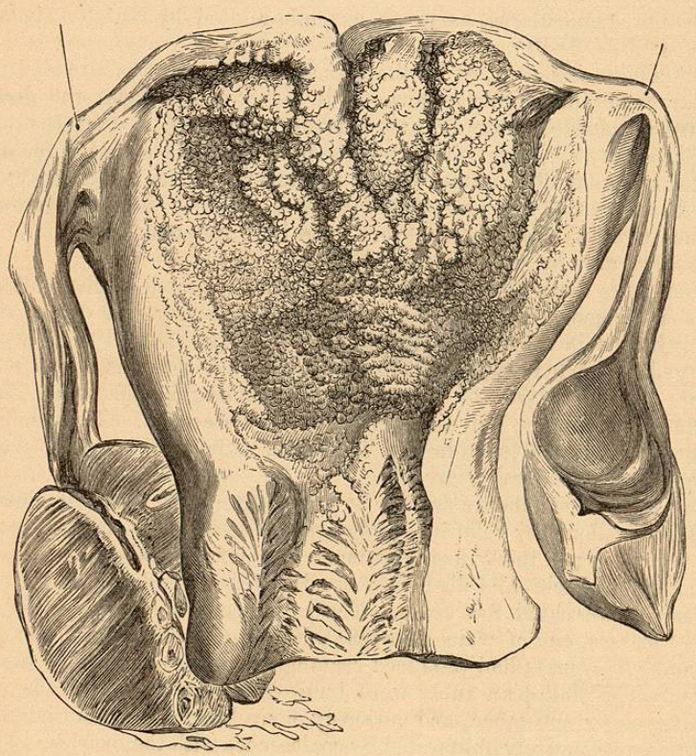
The mucous membrane is not, however, always the seat of election. Thus Dr. Willoughby relates (*Pathological Transactions*, 1869) the case of a woman aged thirty-five, the mother of several children, who had pulmonary tubercle, and died of tubercular pleurisy and peritonitis. She had not menstruated for years. The pelvic peritoneum was beset with cheesy masses, one of which, the size of a walnut, was beneath the peritoneum. This mass had produced rectangular anteflexion of the uterine cavity. The Fallopian tubes were immensely distended with the same cheesy-looking substance, and curiously convoluted; the fimbriated extremities were entirely obliterated by coalescence with the ovaries. These organs were as large as walnuts, filled with the same cheesy material, and one contained a blood effusion of hæmatocele. There was no tubercular deposit in the lining membrane of the uterine cavity.

The urinary mucous tract is sometimes affected. All the pelvic organs may be matted together by plastic effusions. Peritonitis, indeed, is a not infrequent consequence.

In St. George's Museum (No. xiv. 78) is a good specimen of scrofulous disease of the uterus, tubes, and both ovaries. The body of the uterus

contained a quantity of *white soft tubercular matter*, which, at the fundus, was firmer and more consistent, and with a definite outline, penetrating, as it were, into the muscular substance of the uterus. The Fallopian tube on the right did not contain similar matter. Both tubes were impervious at their uterine extremities. The mucous membrane of the cervix and vagina was free from tubercular ulceration, but greatly inflamed, having *miliary deposits underneath it*. Both ovaries were converted into cavities, and contained remnants of a thick semi-fluid tubercular matter. They were greatly enlarged, and their walls much thickened. There were also one or two fibrous tumors. There existed also extensive peritonitis and ulceration of the glands, of both small and large intestines, which in the rectum had proceeded to perforation, and extensive tuber-

Fig. 165.



Tubercular Disease of Uterus (R. B.).

The uterus full of soft cheesy matter; its internal surface irregular and granular, and devoid of mucous membrane; the cervix unaffected. The Fallopian tubes were filled with, and surrounded by, masses of tubercular deposit. (Nat. size, Guy's Museum, 2261[75].)

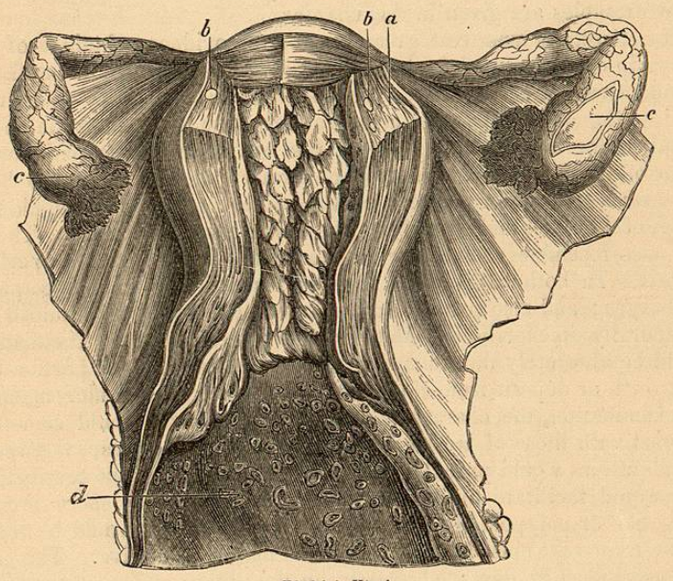
culization of the lungs and pleurisy, also scrofulous ulceration of the right sterno-clavicular joint. The simultaneous affection of ovaries, tubes, and uterus, and general scrofulous disease, is also exemplified in another specimen in St. George's Museum (No. xiv. 79), described in the cata-

logue as "Scrofulous disease of the uterus, Fallopian tubes and left ovary. The mucous membrane of the uterus is extensively ulcerated, and covered over by a white scrofulous deposit. The tubes are filled with scrofulous deposit, and are much distended and tortuous. The end of the right tube is dilated into a large sac, which was filled with a white flocculent creamy fluid. The left ovary was converted into an abscess, containing scrofulous pus. From S. H., aged eighteen, who died of psoas abscess and scrofulous disease of the medulla oblongata."

The specimen from which Fig. 165, Guy's Museum, 2261[75] is taken came from a woman aged twenty-six, who died of general tuberculosis; the thoracic and abdominal viscera being extensively involved in the disease. This specimen is remarkable as furnishing evidence of the difference in character of the mucous membrane of the body of the uterus and of that of the cervix. Strictly tubercular disease is limited in this case and in many others to the body of the uterus. In this respect, tubercular disease stands in contrast with cancer, which shows such a decided preference for the cervix.

The ulcerative disposition of the uterine phthisis is also well seen in the following illustration from Carswell (Fig. 166).

Fig. 166.



Phthisis Uteri.

Tubercular masses in the mucous membrane of the body of the uterus. Ulcers in the vagina. The Fallopian tubes enlarged by tubercular infiltration. (Half-size, Carswell.)

"This figure affords a striking illustration of the formation of tuberculous matter in the cavity of the uterus and tubes, as well as ulceration of the follicles and mucous membrane of the vagina. *a*, cavity of the uterus laid open, and nearly filled with masses of cheesy-looking tuber-

culous matter. The walls of the uterus, thicker and more vascular than in the healthy state, contain two or three small masses, *b*, of the same substance. Both tubes, *c*, are dilated; the left completely filled with soft tuberculous matter, and laid open towards its inferior extremity that this substance may be seen. The right tube was filled with a turbid, milky-looking fluid. The internal surface of the vagina, *d*, presents a great number of ulcers, similar to those so frequently met with in the trachea of patients who die in the last stage of phthisis. The ulcers were apparently formed in the follicular structure of the vagina; some of the follicles enlarged, and presenting a central opening, are distinctly seen in the figure. The form of the ulcers is round, oval, or irregular, none of them larger than a split pea; their edges sharp and pale; and their bottoms either pale or slightly vascular."

The vagina is so rarely affected that Virchow is quoted by Courty as being the only observer who has verified in this part the development of numerous tubercles.

The *prognosis* is in all cases grave. The disease in the uterus being generally secondary, or at least coincident, with disease in other organs, it can rarely admit of cure. The tendency is towards extension to the tubes, ovaries, and surrounding structures. Fatal peritonitis may at any time arise. Courty relates an interesting case of this termination; and other examples are given in this chapter.

The *diagnosis* must rest greatly upon the evidence obtained of tuberculosis in other parts of the body, especially in the lungs. It is thus of a presumptive character. Since the disease attacks the body of the uterus, leaving the cervix quite or comparatively free, it is most liable to be mistaken for malignant disease of the body, chronic metritis, or some forms of fibroid tumor. There is generally enlargement of the body of the uterus of a uniform character, thus differing from the irregular nodulation of fibroids, and resembling the enlargement of cancer. The cases may also resemble each other in the uterus being fixed by perimetric deposit. In both cases there may be hemorrhages and muco-purulent discharges; and also pain. But, as in other forms of tuberculosis, there is generally amenorrhœa. Metrorrhagia is exceptional. The distinction would be absolutely determined by bringing away a small portion of the outgrowth or deposit from the cavity of the uterus. Under microscopical examination, the characters of malignant growth would come out in contrast with those of tuberculous matter. In either case, therapeutical considerations would probably indicate the dilatation of the cervical canal. This would facilitate digital exploration, by which the more prominent tumor-like or polypoid character of malignant growths would be detected.

The *treatment* must be looked upon as mainly palliative. The general treatment must be governed greatly by the nature and extent of the distant complications. It is of the same kind as that for tuberculosis of the lungs. The local treatment will be indicated by the local symptoms. If there be hemorrhage or profuse muco-puriform or cheesy discharge, with or without pain, it will be proper to dilate the cervix with laminaria or sponge-tents; and to swab the interior of the uterus with nitric acid, tincture of iodine, or acetic acid; or iodine-ointment may be inserted every three or four days. Disinfecting vaginal injections of lead, zinc, or carbolic acid will be useful adjuvants.

CHAPTER XXVII.

CANCER: DEFINITION; DEGREES OF MALIGNANCY; ITS LOCAL ORIGIN; HEREDITARY TRANSMISSION; ITS FREQUENCY. IS IT CONTAGIOUS? CAUSES; FORMS OF: MEDULLARY; EPITHELIOMA; SARCOMA; SCIRRHOUS; MYXOMA; CORRODING ULCER DURATION OF CANCER. CANCER AND PREGNANCY. THE COURSE AND TERMINATIONS OF CANCER; DIAGNOSIS; PROGNOSIS. TREATMENT; QUESTION OF CURABILITY; TOTAL EXTIRPATION OF UTERUS; AMPUTATION OF VAGINAL-PORTION, SELECTION OF CASES FOR; THE OPERATION; CAUTERY, ACTUAL AND POTENTIAL. TREATMENT OF CANCER OF BODY OF THE UTERUS. PALLIATIVE TREATMENT; LOCAL AND CONSTITUTIONAL.

THE clinical definition of cancer would be a disease tending to destroy the organ which it has attacked, to invade the surrounding structures, to infect the system, and to cause death. These are the chief characters of "malignant disease." This definition will embrace several forms of disease which differ in their histological characters, and sometimes in their seat and progress. But howsoever differing in other respects, the common feature of malignancy, that is, a tendency to destroy tissue, to spread and to kill, binds them all together into one terrible group.

The main clinical interest attaching to the differential study of these various forms of malignant disease lies in the fact that they exhibit different degrees of malignancy, and that the seat of development materially influences treatment and the prospect of giving relief. Intimately connected with this point is the question, how to detect the disease in its earliest stages? The tendency of modern pathologists has been to regard all cancer as local in its origin. A most hope-inspiring doctrine; one to which the clinical physician should cling as that which most encourages therapeutical research, and which alone holds out a prospect of ultimate triumph over the disease.

No one who is at the same time conscientious and capable of estimating correctly the nature of cancer will be rash enough to hold out a confident promise of cure in any case. But surely modern research and experience, which have already thrown a ray of light into what had long been regarded as an impenetrable and perpetual gloom, may well justify the hope of achieving further success.

Willing, more than willing, to accept the doctrine that malignant disease is local in its origin, two circumstances appear to me to tell strongly against it. The first is the almost constant tendency to a fatal termination from the moment when we have made an undoubted diagnosis. This means that it is rarely indeed possible to find the disease in its presumed strictly local initiative condition. From its earliest discovery it has already effected a strong hold upon the constitution. The other circumstance is the hereditary force of the disease. There is a general consent