

A CASE OF FIBROMA OF THE OVARY.*

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OVARIAN fibromata are rare. Pfannenstiel¹ gives their incidence as only 2 to 3 per cent. of solid ovarian tumours, and Bland-Sutton² terms them "pathological curiosities." On this point it has to be recognised that difficulty has not rarely been experienced in distinguishing this variety of tumour from sarcoma. Griffith³ quotes Bland-Sutton: "It is important to remember that the majority of solid ovarian tumours classed in museums as fibromata are examples of sarcomata." He demurs to this statement as requiring further proof and adds: "It is at least certain that many tumours classed as sarcoma are really fibroma."

The age limit is a wide one. Hektoen and Riesman⁴ give it as from 8 to 70 years but commonly between the age of 40 and 60. Doran⁵ says that the disease is relatively frequent in youth, yet it may develop after the menopause.

Fairbairn⁶ in his valuable paper on the subject points out that fibroma may involve the ovary in one of three forms. The first in which the whole organ is converted into a hard tumour, maintaining in some degree its original shape, but leaving no recognisable portion of its original structure. A second variety where the growth forms a hard tumour within the ovary spreading the tissue of the latter over its outer surface so as to encapsule the fibroma within the organ; and a third form in which the new growth is pedunculated from the surface of the ovary. Dr. Mary Dixon Jones has applied the term gyroma to a condition where the ovary becomes enlarged by the presence of one or more oval fibroid nodules within the organ, and which are believed to be developed from the corpora lutea.

Cystic and calcareous^{7,9} degeneration may occur.

In its commonest form ovarian fibroma presents itself as a very hard, rounded, non-sensitive, unilateral, mobile tumour. It is of slow growth, but may attain to the size of the adult head or larger. Though the tumour does not open up the mesosalpinx, the pedicle is usually somewhat short. Apart from degenerative changes, adhesions with surrounding structures are uncommon. Ascites is not invariably present, though it

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occurs in a large proportion of instances. Thus Fairbairn⁶ states that it occurred in one only of his seven cases, and Doran⁵ in five out of eleven. The unaffected ovary is frequently small and infantile. They give rise to no especially characteristic symptoms. Cachexia is absent and the catamenia is usually unaffected. Bladder trouble with local pain and discomfort may be complained of. Torsion of the pedicle giving rise to urgent symptoms has been reported, and when lying in the pelvis, or especially when impacted in that cavity ovarian fibromata may, in common with other tumours, cause pressure symptoms and obstruction to delivery.⁸

The diagnosis cannot always be confidently made. Doran⁵ says: "A markedly hard and painless tumour, moving separately from the uterus, in a very young woman, is most probably an ovarian fibroma." Pedunculated uterine myoma, the physical signs of which would most closely simulate this condition, is here, in Doran's judgment, excluded by the age reference. Dermoids, on the other hand, are very common in girls, but are not as a rule so uniformly hard and are more liable to be fixed by adhesions. Further, Doran notes that the hardest dermoids are usually associated with a considerable amount of pain. Sarcoma of the ovary, he adds, also relatively common in youth, is softer, of more rapid growth, and associated with cachexia and amenorrhœa. Too much importance should not be attached to the presence or absence of ascites.

The diagnosis of the condition as it arises in a young patient has been more particularly considered here, as it bears on the case the details of which are given in this paper. It will be noted that, in this case, there was no ascites and amenorrhœa had been present for twelve months antecedent to the date of examination.

F. B., single, æt. 17, was sent to me by Dr. Foley, of Abergavenny, and was admitted into the Cardiff Infirmary on July 29th, 1903, complaining of the existence of a hard lump in the lower abdomen, with pain and discomfort mainly referred to the left iliac region. In this region the swelling had been first discovered some 16 months previously, and was then estimated by the patient to be about the size of a hen's egg. In the meantime it had considerably increased in dimension, and the symptoms associated with it had practically incapacitated her for her duties as housemaid, the "dragging" pain, to use the patient's term, being at times very severe. Up to the date of admission there had been absolute amenorrhœa for 12 months, and for some time before that the catamenia, which had commenced at the thirteenth year, had been irregular, but not associated with pain or undue loss. There had been no leucorrhœa. Dysuria, without frequency of micturition, had been present for some six weeks. The general health and family history were good.

On examination the general condition was found to be good, and no abnormality was detected in the heart, lungs and urine. In the lower

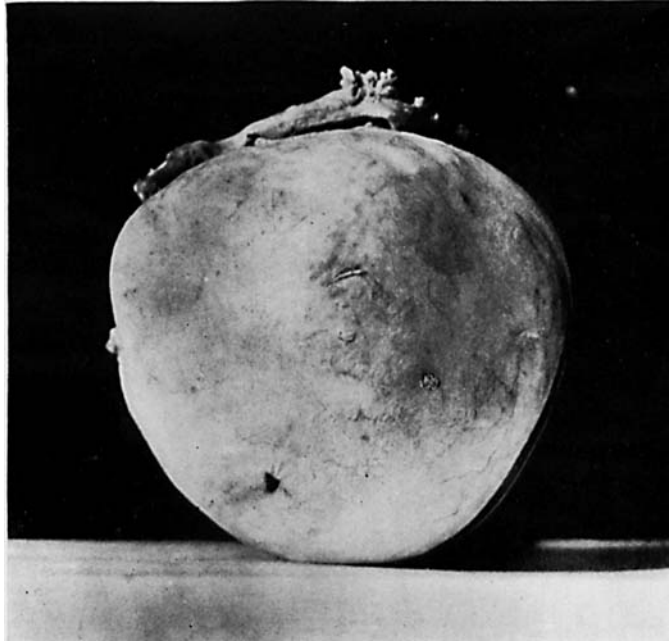


FIG. 1.—The tumour, as a whole, showing the generally smooth contour.

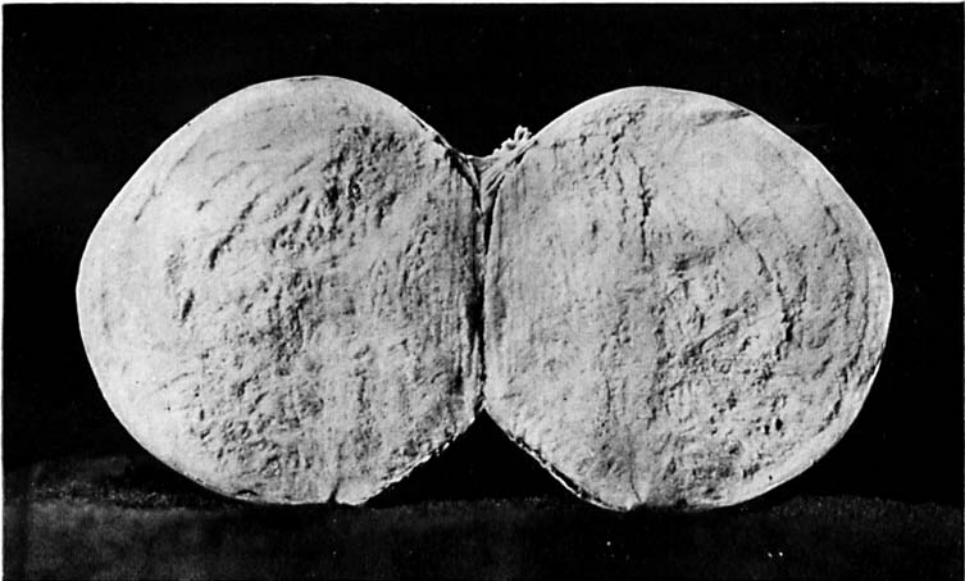


FIG. 2.—Tumour bi-sected, showing the fibrillated cut surfaces and the points where the capsule was more readily separable.

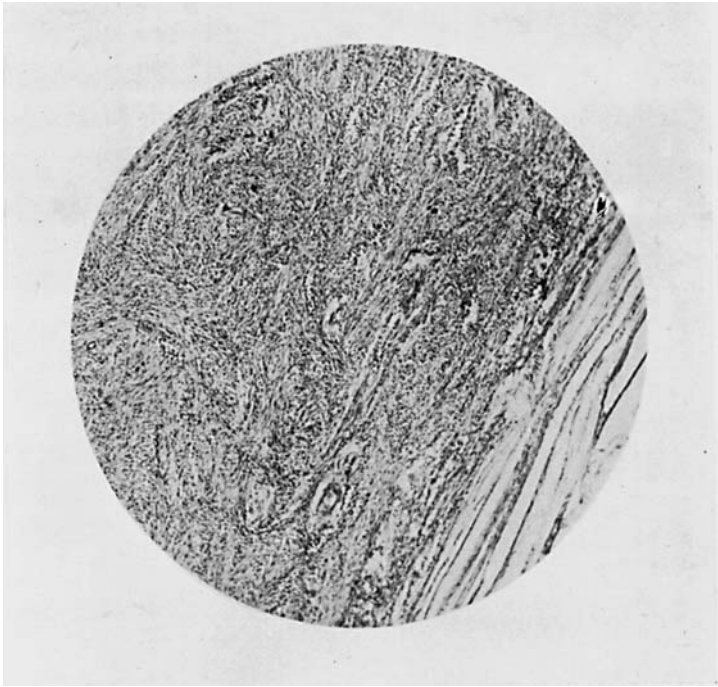


FIG. 3.—Micro-photo. $\times 55$, showing the multi-layered fibrous capsule and blood-vessels in a densely interlacing fibrous stroma.

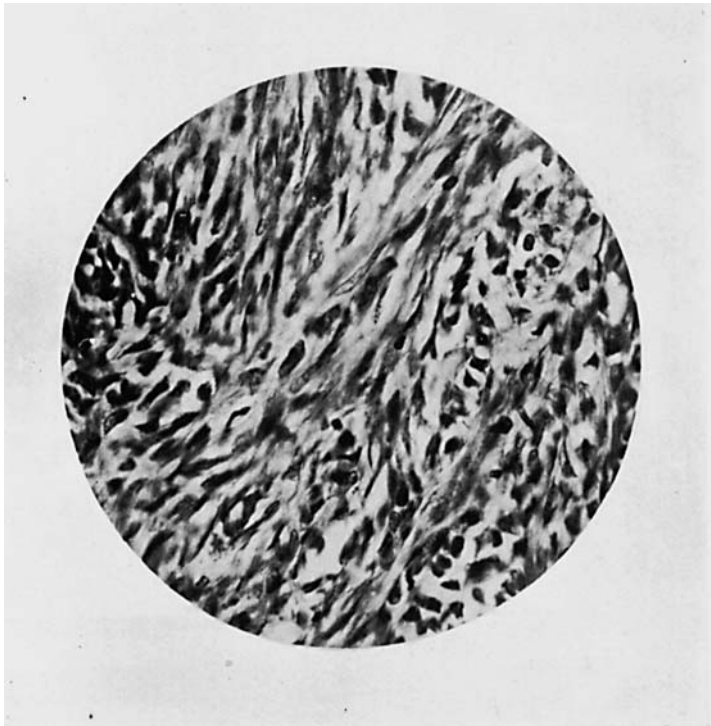


FIG. 4.—Micro-photo. $\times 400$, showing the nuclei of fibrous bundles in transverse, oblique or longitudinal section; also connective tissue nuclei.

abdomen, rather more to the right than to the left of the middle line, a smooth very hard, rounded, non-sensitive tumour was to be felt rising out of the pelvis to within a couple of inches of the umbilical level, and about the size of a foetal head at term. It was, to a limited extent, movable upwards and from side to side. Bimanually the tumour was found to occupy and depress the anterior and, to a lesser degree, the right lateral fornices. The somewhat softened cervix was directed downwards and backwards, and was displaced toward the hollow of the sacrum. The body of the uterus could not be satisfactorily outlined, but bimanual movement of the tumour was not imparted to the cervix, and the diagnosis of solid ovarian tumour was made. Abdominal section was performed on August 5th, the short pedicle secured, and this tumour of the left ovary removed. There were no adhesions and no ascites. The right ovary, which was infantile, and showed a ripe Graafian follicle on its surface, was allowed to remain undisturbed.

The patient made an uninterrupted recovery, and is now in good health, and has resumed her work.

DESCRIPTION OF SPECIMEN.

Macroscopic. The tumour (Fig. 1), which weighed $19\frac{1}{2}$ ounces, was generally of pearl-white colour, of very hard consistence and irregularly ovoid form with smooth lustrous surface. (The surface of these tumours has been erroneously described by Kelly¹⁰ and others as "covered with smooth peritoneum.") Small veins were visible coursing superficially in the growth and concentrating toward the hilum. In this region, also, some ill-defined nodules were apparent.

On bi-section (Fig. 2) the tissue of the tumour was found to be very dense and resistant to the knife, almost as much so as cartilage. Practically no blood followed the section. A well-defined capsule, which was evidently the thickened tunica albuginea, enveloped the whole, and was, for the greater part, in intimate connection with the underlying tissue. Toward the proximal pole, however, the capsule was readily separable, and was further divisible into several layers. The cut surfaces remained flat, and showed an intricate interlacing of fibrous tissue strands of dead-white colour, excepting a band, about an inch in width, which was pink-white and occupied a position corresponding to the paroöphoron of the ovary. There was no evidence, to the naked eye, of the presence of normal ovarian tissue, nor of cystic or other form of degeneration. The whole organ seemed to be transformed into a fibrous tissue tumour contained within its capsule. The circumferences were 12 inches by 13, and the diameters 4 by 4.2 inches. The portion of the tube and its related meso-salpinx removed with the tumour, were normal in appearance and calibre.

Microscopic. Fig. 3 shows micro-photograph $\times 55$. The capsule was composed of several layers of dense, practically non-nucleated, fibrous tissue in roughly parallel arrangement. Underlying this a goodly number of blood-vessels, some with well-defined walls, in a stroma of closely interwoven bundles of liberally nucleated fibrous tissue. At points where the tissue was looser the fibrous network was seen to be supporting a cellular connective tissue. In deeper areas the blood-vessels were very scarce or absent.

Under the higher power (Fig. 4 micro-photograph $\times 400$) the fibrous bundles seen in cross and longitudinal section showed their spindle,

elliptic and round nuclei. Also the branching nuclei of the connective tissue.

No search for muscle fibre by teasing out the tissue prior to microscopic examination having been instituted, the statement that no muscle was present cannot be definitely made. By the ordinary methods of examination, however, none was discovered, nor any sign of a Graafian follicle or cell-lined space.

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