

AN OVARIAN TUMOUR PARASITIC ON THE LIVER

(A Case Report)

by

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Introduction

It is an accepted fact that ovarian tumours can rotate through three or more complete circles due to undue movements of intra-abdominal organs, such as excessive movements of the intestines, like in diarrhoea after taking a purgative, or contraction and retraction of the uterus after parturition. After the twist is initiated further torsion is favoured by haemodynamic action. The twisted pedicle compresses the thin-walled veins in the pedicle and venous circulation from the cyst is retarded; but the arteries which have comparatively thick walls are not sufficiently pressed upon and continue to pump in blood at each heart beat. The force of each heart beat is thus transmitted through the arterial system to the substance of the tumour and favours further torsion. The increased tension causes severe abdominal pain together with signs of peritoneal irritation. Subsequently, adhesions form to surrounding structures, and, occasionally as a result of atrophy of the pedicle, the tumour becomes de-

tached and finds a new blood supply from adhesions to some other structures within the abdomen — usually the omentum. Cases of ovarian tumours which were parasitic on the omentum and even intestines have been reported in the literature. However, I have not come across any reported case where a tumour had become parasitic on the liver.

Case Report

B. C. V., aged 45 years, was admitted to the Gynaecological Department, Miraj Medical Centre, on 28-8-64 with the following complaints:

(1) Mass arising in the right hypochondrium since one year, (2) menorrhagia since 8 months, (3) pain all over the abdomen — 8 months, (4) burning micturition — 8 months, (5) primary sterility — 28 years.

Onset and progress of chief complaints

About one year prior to admission, the patient had noticed a mass in the right hypochondrium which gradually increased to the size of a football. The rate of growth was rapid during the last four months and the tumour had also become painful during that period. There was no history of vomiting. Bowels were constipated.

Menstrual History

Age of menarche — 12 years. Past menstrual flow used to be regular, lasting for 4 to 5 days. Since 8 months the flow was lasting for 10 to 11 days, regularly every month.

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Clinical Findings

On examination, a big globular cystic mass, about 12" in diameter, was seen occupying the whole of the upper abdomen and extending to about 3" below the umbilicus. The mass could not be pushed down into the pelvis. The surface was irregular. On per vaginal examination, a firm irregularly enlarged uterus was felt. The abdominal mass could not be palpated through the fornices. Cervix was normal in appearance.

A diagnosis of ovarian cyst, which had become adherent to the upper abdominal viscera, was made. The possibility of a cyst arising from the liver was also kept in mind in view of the history and the fact that it was not possible to reach the upper margin of the cyst on the right side.

Operative procedure

On 29-8-64, the abdomen was opened by a right paramedian incision extending from about 3" above the umbilicus to about 2" above the symphysis pubis. The peritoneal structures were palpated. There was a small myoma growing from the right cornu of the uterus. The right ovary and tube were normal. The left tube could be palpated for about an inch after which it seemed to merge into a mass of fibrous tissue. The ampullary and fimbrial ends of the left tube could not be palpated. The left ovary also could not be palpated. The cyst had no connection with the uterus or adnexae and seemed to be arising from the liver. There were a few bands of adhesions to the posterior peritoneum. The cyst was thin-walled and very vascular. The right lobe of the liver was spread out like a thin shell over the upper surface of the cyst; the left lobe was also involved and was stretched out over the tumour mass (Fig. 3).

The cyst was carefully dissected away from the liver after a preliminary tapping. Bleeding was minimal. After the cyst had been removed it was noted that the bile duct was opened at one point. Through the opening a catheter could be passed distally into the common duct and duodenum, and proximally for a short distance into one of the tributaries. It was obvious that a tributary of one of the hepatic ducts had

been divided. The proximal end could not be found. So the gall bladder was removed and a catheter was passed up through the cystic duct past the opening which was sutured transversely with interrupted silk sutures. Since there was some oozing a rubber drain was put in and the abdomen closed in layers after bringing out both tubes through separate openings.

Histopathological examination of the cyst showed that the walls were made up of fibrous tissue with large areas of hyalinization. It was lined internally by one to two layers of mucin-producing tall columnar epithelium. A thin layer of tissue immediately under the lining epithelium was made up of thin elongated cells with oval to spindle-shaped nuclei. The layer looked very much like compressed ovarian tissue (Figs. 1 and 2). Pathological diagnosis was pseudomucinous cystadenoma of the ovary.

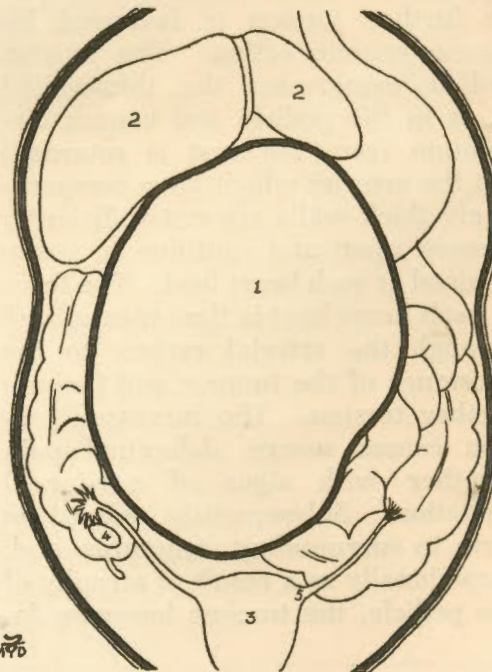


Fig. 3

Findings at laparotomy—(1) cystic tumour, (2) liver, (3) uterus, (4) right ovary & tube, (5) left tube.

Post-operative management

The post-operative period was uneventful. A cholangiogram through the bile duct drainage tube on the 10th day showed the hepatic duct draining freely into the bile duct and a portion of the duodenum. The drainage tubes were removed on the 13th day. The patient was discharged 21 days after the operation and she had no ill effects.

Comments

This is an unusual case of pseudomucinous cystadenoma of the ovary, the pedicle of which had probably undergone torsion and atrophy and the cyst had become completely detached from the pelvic structures and had subsequently survived as a parasite on the liver.

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See Figs. on Art Paper V