

## TORSION OF PAROVARIAN CYST

(Case—Report)

by

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Parovarian Cysts arise from the vestigial remnant of the mesonephric duct situated in the mesosalpinx. Small parovarian cysts are common benign neoplasms in 30-40 years age group and constitute 10% of all the adenexal growths. Occasionally these can be of bigger size as in the present case and are to be differentiated from the ovarian cyst. Rarely these can undergo torsion mimicking conditions like acute appendicitis or ectopic pregnancy.

### CASE REPORT

G.A. 20 years unmarried girl, was admitted on 1-3-1975 with a history of gradually increasing swelling in the lower abdomen.

**Menstrual History**—Menarche at 12 years, Cycle 4/28 regular with normal flow.

General physical examination revealed a well built and nourished young girl. Cardiovascular and respiratory systems were normal. On abdominal examination a cystic mass arising from the pelvis corresponding to 18 weeks pregnancy was palpated. It was mobile and nontender. On rectal examination uterus was shifted to left

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and a cystic mass was felt in the right and anterior fornices which was continuous with the mass felt per abdomen. Presumptive diagnosis of ovarian cyst was made. On laparotomy a cyst of 18 cm x 12 cm with a pedicle in the right mesosalpinx was seen. The tube was stretched over the cyst. There was one and a half twist of the pedicle. Neither the cystic mass nor the tube showed any evidence of infarction. Right ovary was unremarkable. The pedicle was untwisted, clamped, cut, ligated and the stump was peritonized. The tube was also sacrificed since it could not be separated. Left ovary, tube and uterus were otherwise unremarkable. The patient made an uneventful recovery and was discharged on 12th day of operation. Since then she has not presented with any problem.

### Pathology Gross

An irregularly oval cyst arising from ovarian mesentery 18 cm x 12 cm in its longest dimension, with thin and smooth surface. Fallopian tube was stretched over the cyst (Fig. 1). Cut section showed lumen containing watery fluid with smooth internal surface.

**Microscopy:** Hematoxylin and Eosine stained sections showed cyst wall of dense collagen bundles with a lining of single layered low cuboidal epithelium. Masson trichrome showed fine smooth muscle slings within a collagenous wall.

Section from the tube was unremarkable.

### Discussion

Small paraovarian cysts are common

benign neoplasms of the mesosalpinx which are usually small and symptomless. Occasionally these become large and simulate ovarian cyst. Such large cysts are reported with great scarcity in the literature. These cysts may expand into the leaves of broad ligament and thus elevate the uterus and force it laterally (Novak and Novak, 1958). An interesting feature is the torsion which these cysts might undergo occasionally irrespective of the presence or absence of pedicle giving rise to gangrenous infarction of the cyst wall and tube accounting for clinical manifestations like acute abdomen, (Keminestor 1938; Brady 1961 and Black 1962). The present case appears to be largest parovarian cyst one has come across in the literature. At laparotomy the cyst revealed one and a half twist in the pedicle but without any gross or microscopic evidence of ischemia or gangrene in the cyst wall or tube. This can be explained by the fact that the twist must not have been complete enough to interfere with local circulation and probably of short duration as well. The cyst usually has a thin wall with smooth glistening surface and the lumen contains serous fluid like a serous cystadenoma.

Microscopy however reveals a cuboidal to columnar epithelial lining beneath which there is connective tissue and smooth muscle fiber (Jeffcoate 1967).

The tumour is benign and needs local excision.

#### Summary

A rare case of 'Torsion of parovarian cyst' which was misdiagnosed for ovarian cyst has been presented.

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See Figs. on Art Paper VIII