BILATERAL RUPTURED CHOCOLATE CYSTS OF THE OVARY

(Presenting as a case of acute abdomen)

by

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The chocolate cysts of the ovary are in general symptomless. They may attain a diameter of several inches but with adequate room for expansion they give no indication of their presence. The symptoms when present are those of endometriosis in general and no specific symptoms relating to ovarian endometriosis are seen. Occasionally these cysts may rupture and present as a case of acute abdomen but the true nature of the disease is recognised only at laparotomy. Pratt *et al* (1952) found only 15 cases in a review of the literature and added ten of their own cases making a total of 25 cases. One similar case was reported by Sayed *et al* in 1958.

Case Report

Mrs. A. aged 24 years was admitted on 31st July 1972 at 2.25 p.m. as an emergency case in L.L.R. & Associated Hospitals, Kanpur with the complaints of severe pain in the abdomen with vomiting and giddiness for the last 36 hours. She got married on 13th July, 1972 and had her last menstrual period on 20th July, 1972. Her menstrual cycles were regular and were associated with progressive dysmenorrhoea. The patient was alright two days back when she developed severe pain in the abdomen after defaecation which was associated with nausea and vomiting.

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On examination her general condition was satisfactory. Pulse 116/mt, B.P. 110/70mm of mercury.

On abdominal examination there was tenderness in the right lower abdomen.

Vaginal examination revealed cervix pointing backwards, uterus anteverted nulliparous size., fullness in the left fornix and ill defined tenderness felt through the right fornix.

Blood examination showed haemoglobin 13 Gms%, total W.B.C. count 10,200 per cmm, polymorphs 78%, lymphocytes 18%, basophil 4%. She was put on nothing orally. Ryle's tube suction ½ hourly and I.V. drip and antibiotics. Pain was slightly decreased but on 2nd August, 1972, she again had an attack of severe pain in the abdomen associated with nausea and vomiting following which her systolic blood pressure fell to 70 mm. of Hg. and pulse went upto 160/mt. She was given stimulants and blood transfusion.

Laparotomy was done on 3rd August 1972. On opening the abdomen there was tarry coloured free fluid in the abdomen and uterus was normal in size. There were bilateral ruptured chocolate cysts of the ovary measuring about 6 and 8 cm. in diameter, respectively. There were no adhesions in the pelvis. Since the patient was young, bilateral ovarian cytectomy was done and abdomen closed after complete haemostasis. Postoperative period was uneventful and the patient was discharged on 2-9-1972.

Histopathological Examination:

The ovaries consist of loose and oedematous stroma which is well vascuarized. In it several areas reveal recent and

old haemorrhage with haemosiderin deposition and pigment laiden macrophages. There are also some slit like glandular spaces lined by cuboidal epithelium surrounded by endometrial stoma (Fig. 1).

Heamorrhage around these glands is also present. Occasionally glands are seen with lining epithelium only. The glands in general are sparce but show strong resemblance to endometrial glands.

Diagnosis: Ovarian endometriosis.

Discussion

Sampson in a total of 332 patients reported 98 cases of pelvic endometriosis and 64 cases of endometriosis of the ovary. Ovarian endometriosis may present as surface implants or as chocolate cysts of the ovary. These cysts are of two types, in one the cysts show a strong perforating tendency, produce multiple adhesions with surrounding structures and do not grow to a large size, while in the other type the cysts do not perforate and show no marked adhesions, attain a large size and on rupture cause abdominal symptoms (Novak) of varying intensity due to effusion of tarry coloured fluid into the peritonial cavity.

If the perforation is small or is partly obstructed or covered, the outflow of the contents is slow and the effusion is blocked by plastic peritoneal reaction resulting in many adhesions. If it is larger it manifests itself clinically by symptoms of acute abdomen needing surgical interference and can be easily confused with ruptured ectopic, ruptured follicle or ruptured corpus luteal cyst. The present case resembles the latter type.

The endometriosis characteristically is a disease of reproductive life most frequently seen between 30 to 40 years of age. Masson and Carikar (1942) reported that 84% of the patients in their series were between 30 to 49 years of age in contrast to our present case who was only 24 years old.

The clinical history and the symptoms of the present case were typical of this variety of pelvic peritonitis as described by pratt *et al* (1952) except for the gastro-intestinal symptoms like nausea and vomiting which are symptoms commonly associated with appendicitis and were also present in our case.

The pain was severe but not as excruciating as that of acute appendicitis or ruptured ectopic pregnancy. In the present case the patient had two attacks of pain in abdomen at an interval of 36-40 hours and the second attack was associated with signs of shock. This could be explained due to rupture of the cysts of either side on two consecutive occasions, one causing only peritoneal irritation while the rupture of the second cyst resulted in the collapse of the patient. A similar case of bilateral ruptured endometrial cysts has also been reported by Pratt *et al* (1952).

Histologically though definite endometrial glands were not identified, but the presence of sheets of pseudoxanthoma cells beneath the epithelium confirmed the diagnosis. The diagnosis of chocolate cyst of the ovary is difficult to make preoperatively but the presence of the condition should be suspected in a patient with a low peritoneal irritation without localization. This picture and the past history of progressive dysmenorrhoea and the presence of tender nodules in the pouch of Douglas or uterosacral ligamets are also suggestive of ruptured chocolate cyst of the ovary.

The treatment is exploration and conservative surgical measures in young patients preserving a much of normal ovarian tissue as possible. Conception

after bilateral cystectomy has been reported by Pratt *et al* (1952).

Summary

An unusual of case of bilateral ruptured endometrial cyst causing acute abdomen is reported.

References

1. Masson, J. C. & Cariker, Mildred: Proc. Interst. Postgrad. M.A. North America; 209, 1942.
2. Novak, Emil, Gyn. and Obst. Pathology, W. B. Saunders, Philadelphia and London, 459-467, 1947.
3. Pratt, J. H., Higgins, R. S. and Foust, G. T., Am. J. Obst. & Gynec. 63: 90, 1952.
4. Sampson, J. A. quoted by Emil Novak (1947).
5. Sayed, B. A., Sahgal, K. N. and Patel, M. A., Jour. Obst. Gynaec. India, 9: 134, 1958.

See Fig. on Art Paper X