

DECIDUAL CHANGE IN THE SEROSA OF APPENDIX ASSOCIATED WITH CARCINOID IN A PREGNANT WOMAN

by

K. P. P. RAO,* M.D.

and

C. SYAMALA BHASKARAN,** M.D.

Ectopic decidual reaction in the serosa of appendix associated with pregnancy has not been reported. Such, ectopic decidual cells during pregnancy has been reported in the ovary (Ober *et al* 1957), posterior and anterior surface of the uterus, pouch of Douglas and other areas of pelvic peritoneum (Weller 1935 and Tilden and Winsted 1943). Bettington (1947) has reported its occurrence in the renal pelvis.

The present case is unusual in the fact that apart from ectopic deciduosis of appendicular serosa, there was an associated carcinoid tumour of the appendix. The patient presented with symptoms of acute appendicitis.

CASE REPORT

Mrs. L.R. a 28 year old female, gravida 2, para 1 with a history of 7 months amenorrhoea and severe pain in the abdomen was admitted in a private nursing home on 16-7-80. Her chief complaints were severe abdominal pain in the right iliac fossa associated with vomiting of 2 hours duration. The pain was of radiating type. Her obstetric history was nil remarkable.

The patient when admitted was suffering with severe pain. Abdominal examination revealed an uterus of approximately 28 weeks gestation

size. The foetal heart rate was normal and regular. Breech presentation was present. Uterus was soft and no contractions felt. She had severe tenderness in the right iliac fossa and no mass was felt. Laboratory examination revealed: Haemoglobin 9.9 G%, TLC 7,600/Cmm, DLC—P 58, L 37, M 1 and E4. Her E.S.R. by Westergren method was 5 mm in 1 hour. Stools and urine examination was normal, Her B.P. was 110/70 mm Hg; Temperature was 99°C; respiration 16/min; pulse 100 beats/mt. Blood sugar was 83 mg% and blood urea was 19 mg%. A tentative diagnosis of acute appendicitis was made and abdomen was opened.

At laparotomy the uterus, ovary and tubes were found to be normal. There was no free fluid in the abdominal cavity. The appendix was found to be markedly congested with pinpoint haemorrhages and lying retrocaecally. An appendicectomy was done. Post operative period was uneventful and the patient recovered completely.

Macroscopic examination of the appendix revealed a roughened serosa with marked congestion. It was 12 cms. long. The lumen contained faecal matter. There were no stricture or diverticulae. Several longitudinal and transverse sections were studied. Sections taken from the tip of the appendix revealed a microscopic carcinoid tumor. The tumor showed sheets of uniform polyhedral cells with vesicular nuclei and clear cytoplasm separated by thin bands of fibrous tissue. These cells were argentophilic. The tumor was confined to the submucosal area. The serosal surface revealed large pale cells, loosely arranged in nodular fashion (Fig. 1). In some of these microscopic nodules necrosis was seen in the centre. (Fig. 2). There were no endometrial glands. An

*Assistant Professor,

**Professor and Head,

Department of Pathology, Osmania Medical College, Hyderabad.

Accepted for publication on 24-5-84.

histological diagnosis of ectopic decidualis associated with carcinoid was made.

Discussion

Novak and Woodruff (1974) have mentioned that ectopic decidualis can occur in the pelvic peritoneum, in the wall of abdominal peritoneum, omentum, in the serosa of small intestine and appendix. Though extrauterine decidual reaction in pregnant women is an extremely common occurrence, but it rarely causes any symptoms. Fatal intra-abdominal haemorrhage in ectopic decidua has been reported during labour by Melody (1950), Doyle and Phillips (1951) and Rogers and Secklinger (1965). Early post partum abdominal pain due to haemorrhagic decidualis, peritoneal has been reported by Hulme-Moir and Ross (1969). In the present case though there was no severe haemorrhage in the decidua but early necrotic changes in the decidua has been noted and this might have been responsible for symptoms of appendicitis. Further in this case the diagnosis was made early and prompt treatment was undertaken.

In this patient, under the influence of pregnancy hormones, the pluripotential serosal mesenchyme has been transformed to decidual tissue. The carcinoid tumour is an incidental finding. The obstetrician must keep the diagnosis of ectopic decidualis with necrosis or

haemorrhage in mind when a pregnant women complains of symptoms of acute appendicitis or if she comes in a state of shock and no clinical symptoms of trauma such as ruptured uterus or cervical or vaginal laceration are seen.

Summary

Ectopic decidualis of the appendix associated with a carcinoid tumor is reported infrequently. This can give rise to symptoms of appendicitis during pregnancy. The pathogenesis of ectopic decidua is discussed.

References

1. Bettinger, H. F.: J. Path. Bact. 5: 686, 1947.
2. Doyle, G. E. and Phillips, D. L.: J. Obstet. Gynaec. Brit. C'wealth. 64: 270, 1957.
3. Hulme-Moir, I. and Ross, M. S.: J. Obstet. Gynaec. Brit. C'wealth. 76: 746, 1969.
4. Melody, G. F.: J. Surg. 58: 460, 1950.
5. Novak, F. R. and Woodruff, J. D.: 7th Edn. 1974.
6. Nelson, W. W., Greene, R. R.: Surg. Gynecol. Obstet. 97: 1, 1953.
7. Ober, W. B., Grandy, H. G. and Schoenbucker, A. K.: Am. J. Path. 33: 199, 1957.
8. Rogers, W. S. and Secklinger, D. L.: Obstet. Gynec. 25: 391, 1965.
9. Tilden, I. L. and Winsted, T. R.: Am. J. Path. 19: 1043, 194.3
10. Weller, C. V.: Am. J. Path. 11: 287, 1935.

See Figs. on Art Paper II