APPENDICITIS IN PREGNANCY

(A Report on 3 Cases)

by

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An obstetrician is often confronted with appendicitis as one of the associated surgical problems in pregnancy. Although the incidence is rare, the importance is unquestionable as the diagnosis is likely to be missed or delayed. Difficulty in early diagnosis is due to several causes. Abdominal pain and vomiting may be attributed to discomfort of early pregnancy (Baird, 1969) specially if the attack is a mild one. Further, the symptoms simulate very closely pyelonephritis and the two may also co-exist. Leucocytosis and erythrocyte sedimentation rate are of no help. After the third month, the diagnosis becomes increasingly difficult as the appendix occupies a progressively higher level in the abdomen.

Three cases of appendicitis in pregnancy, treated in Medical College, Calcutta, during 1977-1979 are reported here.

Case 1

Sm. C. D. aged 25 years, Po+ o, was admitted on 12-7-77 for acute pain in right lumbar region for 4 days, vomiting and fever for 2 days. Her L.M.P. was on 20-12-76. On examination, general condition Fair, pallor +, pulse 120/min, respirations—28/min, temp—100.2°. Heart and lungs—N.A.D., B.P. 120/70 mm of Hg.

Perabdomen, uterus was of 24 weeks' size, irritable, F.H.S.—present. Tenderness present all over right iliac and lumbar region. No muscle guard or rigidity. On vaginal examination os was closed, no abnormal discharge.

Provisional diagnosis was acute appendicitis with pregnancy. General surgeon was consulted. Next day, the upper abdomen was distended, peristaltic sounds? Intravenous fluid and hourly naso-gastric suction was started. Laparotomy was done at 8-30 p.m. on 13-7-77. Abdomen was opened by right paramedian incision the uterus was pushed to left side and the appendix was visualised. It was 4" in length, kinked, congested and swollen. It was removed with some difficulty due to the enlarged uterus. Inj. Duvadilan 1 amp I.m. 6 hourly was given for 4 days and then orally. Inj. Pethidine 100 mg. i.m. was given 8 hourly for 48 hours along with Ampicillin. Abdominal distension persisted for 3 days, Oral feeding was started from 4th day. There was wound gaping; secondary stitches were necessary and she was discharged in good condition on 30-7-77. Histopathology report showed evidence of acute inflammation of the appendix."

Subsequently she was followed up weekly. She was admitted on 5-9-77, in labour and delivered normally a female live baby, 2300 gms. in weight. She was discharged after 7 days with healthy baby.

Case 2

Sm. M. S. aged 23 years, Po + o, married for 2 years, was admitted on 19-2-79 at 1-30

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a.m. for pain in the lower abdomen and vomiting for 2 days. Her L.M.P. was on 18-12-78.

On examination, general condition—Fair, pallor +, pulse 140/min, temp 100°F, tongue dry, coated. Heart and Lungs—N.A.D., B.P. 118/80 mm. of Hg.

Per abdomen, McBurneys point tender, rebound tenderness +, slight muscle guard. On vaginal examination uterus was 8 weeks size, soft, A. V.; lateral fornices were tender. Provisional diagnosis was subacute appendicitis with pregnancy. A surgical specialist was consulted whose first diagnosis was appendicitis and the second—tubal pregnancy. Investigation: Hb 11 gm %; Urine—N.A.D. At 6-00 p.m. the abdomen was opened by suprapubic transverse incision. Uterus was 8 weeks' size, soft, tubes, ovaries—normal.

The appendix was 3½" in length, thick, cord like, congested and was removed without any difficulty. Postoperatively Inj. Duvadilan and Pethidine was given as in case 1. Inj. Proluton Depot 500 mg given every 72 hours. Recovery was uneventful, duvadilan tablet were continued and she was discharged on 28-2-79. H.P. report was Chronic non-specific appendicitis."

Unfortunately she came back on 5-3-79 with inevitable abortion and required evacuation of the uterus.

Case 3

Sm. B. S. aged 27 years P2 + O, was admitted on 17-4-79 for amenorrhoea of 5 months and pain in right iliac fossa off and on for 1½ months. The pain became severe at times and was associated with vomiting and mild fever. She had 2 home deliveries, both babies living. L.M.P. 5-12-78. One year back she had an attack of pain in the abdomen with formation of a lump in right iliac fossa which was treated conservatively.

On examination nutrition average, pulse 100/min, temp-99°F Heart and Lungs—N.A.D. B.P. 110/80 mm. Hg.

Per abdomen, uterus was 20 weeks' size, foetal movements +; right lumber region—tender. Provisional diagnosis was pregnancy with recurrent appendicitis. Investigations—Hb-74%, Tc 9000/cu. mm, poly-76%, lympho-20%, mono-1%, eosion—3%.

On 2-5-79, the abdomen was opened by Mc Burneys Gridiron incision. The caecum, appendix and terminal ileum were visualised, the appendix was found chronically inflammed. Appendicectomy was done in usual way. Inj. Cryst. Penicillin and streptomycin along with Duvadilan given for 7 days. Recovery was uneventful and she was discharged on 11-5-79. Histopathology report was chronic appendicitis.

Discussion

Two cases were treated in our unit and the third in surgical unit. Our aim is to emphasise that although surgical opinion should be obtained, the obstetrician must be conversant with this problem as sometimes some valuable hours are lost in an attempt to transfer these cases to surgical unit with consequent delay in treatment. One must not forget that the "mortality in appendicitis in pregnancy is largely a mortality of delay" (Browne and Browne).

Upto the third month of pregnancy, the signs and symptoms do not differ from that in a non-gravid state. After the third month, the diagnosis becomes progressively difficult because the caecum and appendix are displaced up towards the right flank by the enlarging uterus so that pain and tenderness are located in unusual position, while the enlarged uterus obscures rigidity of abdomen (Baird, 1969).

Apart from pyelonephritis many other conditions like tubal pregnancy, right basal pneumonia, cholecystitis, twisted ovarian cyst, torsion of right fallopian tube, intestinal obstruction and mesentric thrombosis, confuse correct diagnosis.

All of our cases occurred within 6 months of pregnancy. 85% of Meiling's (147) 26 cases were within first 6 months. Removal of appendix at early stage of the disease does little harm and the chance of abortion or premature labour is much less. Our case 2 aborted after 5 days of discharge from the hospital and in case 1, a live baby at 37 weeks was born. Pregnancy is continuing in case 3.

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