INTESTINAL OBSTRUCTION IN PREGNANCY

(Case Report of Two Cases)

by

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Intestinal obstruction during pregnancy is rare, but a serious entity because of late diagnosis or mistake in the diagnosis and due to misinterpretation of the symptoms like constipation, colicky pain for labour pains.

With this rarity in mind two cases of intestinal obstructions during pregnancy are reported from Medical College, Aurangabad. The literature shows mainly the report of cases, because of rare incidence. In the Western literature incidence of intestinal obstruction in pregnancy ranges from 0.0014 to 0.0034% Barker (1953), Sevesko *et al*, (1960) reported 1 in 6,600 deliveries, Harer (1962) 1 in 3600 deliveries and Morris (1965) 1 in 3,161 deliveries. In Indian literature Bhatt (1965) reported two cases and Dass *et al*, (1968) 7 cases in 8296 deliveries, an incidence of 0.08%.

From Jan. 1969 to 30th Sept. 1974, 16,728 deliveries took place in Medical College Hospital, Aurangabad. Out of these two cases were of intestinal obstruction.

Case No. 1

A 30 years old 11th gravida (AG) whose expected date of delivery was 30–3–1974 was admitted to the hospital at full term on 29-3-1974 with the complaints of labour pains since 3 hours and crampy abdominal pain with distension of the abdomen; having constipation since 48 hours and vomiting since 12 hours. Past history and current pregnancy was uneventful prior to the admission.

Physical examination revealed a conscious ill-looking restless patient having air hunger, profuse sweating and slight pallor. Pulse 120/min, B.P. 90/60 mm. of Hg., respiration 32/min. Uterus was full term, tonically contracted; presentation and position could not be made out clearly, foetal heart sounds were not located. Lower uterine segment was tender, flanks full, free fluid present. Intestinal sounds were sluggish. On vaginal examination cervix was two fingers dilated, partially effaced, membranes absent, clear liquor draining, head at the brim, pelvis adequate.

Initial diagnosis was ? incomplete Rupture Uterus ? concealed Accidental Haemorrhage.

Investigation: Hb.%. 7 gms., B.T. 3′, clotting time. 7′.

Laparotomy was immediately performed under general anaesthesia. Uterus was intact and normal. There was haemorrhagic fluid in the peritoneal cavity (1200 cc). Lower segment caesarean section was done, liquor was clear and baby fresh still-birth male 2.8 Kg. delivered. No retroplacental clot was present. Uterus was sutured and delivered out of the incision for inspection of other abdominal organs when gangrene of the bowel was detected. There was intestinal knotting of the small gut and the sigmoid colon was caught in the knot and was gangrenous. Knotting could not be released by manipulation, so gangrenous sigmoid colon was decompressed and pulled out through the knot-

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ting site. As the patients condition was poor resection was not performed. The gangrenous loop of sigmoid colon was exteriorized through an oblique incision over the left iliac fossa. colostomy fashioned through which a flatus tube passed upto splenic flexure. The healthy loop seromuscular and peritoneal stitches were put, stoma closed in layers and abdomen closed keeping a Mallcoat catheter in the left flank at left paracolic gutter. Patient recovered and colostomy was functioning. She was discharged of 3-5-1974 with advise to report after 6 months for colostomy closure.

Case No. 2

A 25 years old 5th gravida (R.N.) having 8 months' amenorrhea, whose expected date of confinement was 8-7-1974, was admitted to the hospital on 6-6-1974 with the complaints of coliky pain in the abdomen, constipation since 4 days and distension of abdomen since 3 days. Past history and current pregnancy was uneventful prior to the admission.

Physical examination revealed a conscious patient anxious looking, respiratory rate 28/min., pulse 118/min., B.P. 96/70 mm Hg., Temp. 37.2 °c. and mild dehydration. Slight abdominal distension with coils of large gut having no visible peristalsis. There was absence of guarding and rigidity, no exaggerated intestinal sounds and no evidence of free fluid. Height of uterus was 36 weeks, foetal heart sounds were present. Investigation—Hb.%, 8 gms%, TLC 9000/cmm., X-ray abdomen showed gas shadows.

Clinical diagnosis: Sub-acute large gut obstruction with pregnancy.

The patient was started on I.V. fluid therapy with Ryle's tube aspiration. By the following morning she was subjectively bad, abdominal distension had increased by 3", intestinal sounds became sluggish so she was taken for laparotomy under general anaesthesia.. Laparotomy revealed mid gut volvulus which was undone but due to uterine weight it was difficult to relieve the distension of the bowel and therefore L.S.C.S. performed and a live male of 2.3 Kg. (weight) delivered.

Patient did well and discharged on 18th post-operative day.

Discussion

Causes of intestinal obstruction during pregnancy are same but many authors say that pregnancy predisposes the onset of obstruction James (1946). Previous abdominal operations and adhesions are responsible for 60% of the obstructions even during pregnancy. During non-pregnant state gastrointestinal tract occupies most of the space of the abdominal cavity and there is enough room for the movements of the intestines, but during pregnancy the growing uterus encroaches on the available space for the intestinal movement, there is diminished intestinal peristalsis and tendency to constipation. Three periods are described during pregnancy where this complications may be seen i.e. during 4th and 5th month when the uterus is no more pelvic organ, 2nd during 8th and 9th months when the foetal head enters the pelvis and 3rd at the time of delivery and peurperium. 50% of the obstruction occurs during the third trimester. In Dass (1968) series, 3 cases were 8 to 10 weeks pregnant and 4 cases were 18 to 24 weeks pregnant, while Bhatt's (1965) two cases were of pregnancy 22 weeks and 4th peurperal day. Present series 30 weeks and full term pregnant. Greater incidence in India i.e. 0.08% (Dass 1968) is due to high incidence of abdominal tuberculosis, in Dass (1968) series out of 7 cases, 4 cases had abdominal tuberculosis.

Intestinal obstruction is a diagnostic problem, errors are made due to misinterpretation of symptoms, like coliky pain or constipation may be taken as normal intestinal discomfort of pregnancy, or labour pains. The cardinal signs of obstruction, vomiting, colic, distention and constipation may not all be present and the physical signs get masked due to uterus.

Unless the condition is kept in mind, the diagnosis is likely to be missed. When

suspected the diagnostic aids are, X-ray of the abdomen and poor results of enema. Delay in diagnosis can result in strangulation, necrosis or rupture of the bowel with spontaneous onset of abortion or labour. Foetal and maternal morbidity increase with the length of time between diagnosis and surgery. With maternal shock, blood is diverted from the uterus, leading to foetal distress and death. Once the diagnosis is confirmed, immediate laparotomy is indicated and if the uterus is coming in the way it has to be emptied as it was done in both the cases. Foetal wastage is high, Morris (1965) reported 24%, Dass (1968) 63%, while in the present 2 cases 50%. Maternal mortality is reported as 21% Harer (1962), Morris (1965) 14% and Dass (1968) 14%, while both the cases reported by Bhatt (1965) expired.

Summary and Conclusion

Two cases of intestinal obstruction are reported during pregnancy out of which one was of intestinal knotting and the other of mid gut volvulus. To conclude it should be emphasised that intestinal obstruction in pregnancy is often difficult to diagnose, as several symptoms of obstruction are normally associated with pregnancy. Due to enlarged size of the uterus the signs and diagnostic tests may not be of help.

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