ADVANCED ABDOMINAL PREGNANCY

A Report of Five Cases*

by

RAJNI B. VYAS,* M.D.,
P. A. KADOO,** M.B., B.S., D.G.O., G.A. Bangalore***
and

V. G. PATEL, **** M.D.

Introduction

Secondary abdominal pregnancy is a rare outcome of ectopic pregnancy and its going up to full-term is still a rarity. It gains special importance in our country where ruptured ectopic gestation is likely to be neglected. This is a classic phenomenon of nature's attempt at life preservation. It amply illustrates how the life force tries to thrive in adverse circumstances.

The incidence of abdominal pregnancy varies from clinic to clinic. The occurrence of ectopic pregnancy is much more common than abdominal pregnancy. De Villiers (1954) has quoted 77 cases from literature, while Charlewood and Culiner (1955), from South Africa, have quoted 52 cases.

Subhadra Devi (1961) reported 12 cases of her own, giving incidence of ectopic pregnancy as 1 in 150, of

which 7.5 per cent were advanced abdominal pregnancy (16 weeks and more). Poddar (1957) reported an incidence of 1 in 167 for ectopic pregnancies and 4.1 per cent of these were advanced abdominal pregnancy. Our incidence of ectopic pregnancy has been 1 in 258 pregnancies and 4.5 per cent were advanced abdominal pregnancies.

Case 1

C. S., aged 25 years, was admitted on 19-7-59 with history of 9 months' amenorrhoea and labour pains since morning of admission. She was ill throughout her pregnancy, had dull aching pain and was unable to do her routine duties. S' had one full-term normal delivery two years ago. On examination her pulse was 108/minute, blood pressure 140/100 mm. Hg., temperature 99.8°F and she had a dry tongue. Her haemoglobin was 10 gms. Urine examination revealed three to four pus cells. White blood cell count was 8,600/cmm. Systemic examination was normal.

On abdominal examination, uterus was $8\frac{1}{2}$ months' size, abdomen was tense, foetal parts were felt but presentation could not be made out. Pawlik's grip was empty, fundal height was 10.5 inches and girth was 31.5 inches.

On vaginal examination, cervix was neither dilated nor taken up. Presenting part could not be made out.

^{*}Lecturer.

^{**}Ex-registrar.

^{***}House Surgeon.

^{****}Hon. Obstetrician & Gynaecologist. Dept. of Obst. & Gynec., Medical College and S. S. General Hospital, Baroda. Received for publication on 16-8-67.

During observation for five hours, her pulse rate went up to 160/minute and blood pressure fell to 120/80 mm. Hg. With a provisional diagnosis of ruptured uterus, exploratory laparotomy was done. On examination, a sac was found from which meconium-stained liquor came out. The sac was adherent to the surrounding organs and had given way in two places, through which foetal limbs were seen. Foetus was extracted. Placental tissue and sac were removed as much as possible. Uterus was three months' size. Tubal pathology could not be decided. A male asphyxiated baby of 4 lb. 13 oz. was delivered who died 8 hours after delivery. Postoperative period was uneventful.

Case 2

S. M., aged 37 years, was admitted on 18-1-62 with history of 9 months' amenor-rhoea and labour pains with bleeding since 12 hours before admission. There was history of cessation of foetal movements since one day. The patient was 7th gravida and 6th para. She had five full-term normal deliveries, 1 living and 4 dead. Last delivery was five years ago and last abortion was 1½ years ago.

Her temperature, pulse and respirations were normal. Uterus was about five months' size. Neither foetal parts were felt nor foetal heart sounds located. An irregular swelling, 2" x 3" was palpated in the left iliac fossa which was not tender and had restricted mobility.

On vaginal examination, cervix was pointing downwards and backwards, admitted one finger; uterus was anteflexed, firm and of five months' size. In the left fornix an irregular, firm, tender lump was palpable. Blood was present on examining finger. Provisional diagnosis was missed abortion with pelvic inflammation.

Patient was observed for three days, when on the third day she had bilious vomiting, distention of abdomen and absent peristalsis. On detailed enquiry, patient gave history of bleeding per vaginam and fainting attacks following 1½ months' and six months' amenorrhoea. Breast secretion was present.

Provisional diagnosis was made of foetal death with abdominal pregnancy. At

laparotomy, foetus was lying free in the peritoneal cavity, and was extracted. The placenta, which could be separated easily, was partly free and partly attached to the margins of the uterine wall and to intestinal loops. Uterus showed a rent on the left side from the cornual end to the supravaginal portion of the cervix. It had opened the two folds of broad ligament. Both the tubes were normal. In view of the tear, subtotal hysterectomy with bilateral salpingo-oophorectomy was done.

The weight of the foetus was 2 lbs. 5 oz and placental weight 7 ozs.

Case 3

P. M., a multipara, aged 30 years, was admitted with history of 9 months' amenor-rhoea, mild labour pains since three days and diarrhoea since two days. She was 5th gravida with all four children alive. Past menstrual cycles were regular. General examination was normal, except that her blood pressure was 140/100 mm. Hg.

On abdominal examination, uterus was 7½ months size, lie was oblique with head in right iliac fossa and breech in left lumbar region. Foetal heart sounds were regular. There was a lump in the right iliac fossa 3" x 3", firm in consistency, slightly mobile and tender. External version was not possible because of tenderness. Plain x-ray of the abdomen showed transverse lie of foetus, but preoperatively the high position of the foetus was missed. Her haemoglobin was 8 gms and urine was clear.

Vaginal examination revealed closed soft cervix, which was pushed behind the symphysis pubis. The presenting part was not felt. Patient was treated for diarrhoea which was controlled in two days.

She started getting labour pains, coming at an interval of 10 minutes and remaining for a few seconds. Abdominal findings remained the same except the disappearance of foetal heart sounds. The lump in the right iliac fossa used to become more firm during pains. On vaginal examination there was fullness in the right and posterior fornices which was not present on admission. Provisional diagnosis was made as pregnancy with fibroids. During observation, patient had fever and rise in pulse-

rate. After 12 hours of observation patient passed a decidual cast which made the disgnosis obvious.

Exploratory laparotomy was done. mass was found in the right iliac fossa which was mistakenly thought to be gestational sac and opened. This turned out to be the uterus. On lifting it, a sac was found posteriorly which was incised. freshly dead female foetus weighing 2 kgm, was extracted. The sac was full of blood because of partially separated placenta which was easily separated and removed. he sac was left behind. The incision on he uterus, which was friable, was sutured n two layers. The right tube was ligated vhile the left could not be visualised. Placental weight was 500 grm. During peration, the patient went into shock which proved to be irreversible and she expired after 38 hours of operation. The foetus had no external deformities, but autopsy revealed absence of cusps of tricuspid and mitral valves.

Case 4

A woman, aged 24 years, was admitted with 9 months' amenorrhoea, bleeding per vaginam for seven days and pains since four days. Labour pains were more severe since morning but disappeared on admission. Past menstrual history was regular. She had one full-term normal delivery two years ago. It was a prolonged home delivery and infant died after one day.

General examination revealed pallor with pulse rate 118/minutes and temperature of 99.0°F.

On abdominal examination uterus was 8½ months' size, irregular and tender. Foetal parts were easily palpable but presentation and position could not be made out. Foetal heart sounds were not located.

On vaginal examination, cervix was pointing downwards and backwards. It was dilated but not taken up. Presentation could not be made out. Her hamoglobin was 6.5 gms. Provisional diagnosis was made as rupture of uterus.

On exploration, foetus was lying free in the peritoneal cavity, and was delivered. The placenta was attached to viscera and omentum near the right fimbrial end and was left undisturbed. The probability was an abortion through the abdominal ostium of the right fallopian tube which had continued as secondary abdominal pregnancy. The foetus was dead.

Case !

A woman, aged 40 years, was admitted with history of five months' amenorrhoea following irregular periods after last delivery 1½ years back. She had fever with rigors since 15 days, dysuria since two months and a lump in abdomen since 3 months. She had 4 full-term normal deliveries, all alive.

The general condition was good. On abdominal examination an irregular swelling arising from the pelvis and reaching up to the umbilicus was noted. It was not ballotable, nontender and of cystic consistency.

On vaginal examination cervix was not felt. An impacted swelling was felt in the pouch of Douglas pushing the posterior vaginal wall forward. Uterus was felt separate from the swelling. Her haemoglobin was 8 gms. Provisional diagnosis was impacted ovarian cyst. On exploration, secondary abdominal pregnancy from the left tube was detected. On opening the sac, twins were delivered leaving the placenta in situ. The left fallopian tube was ruptured posteriorly at the ampullary end. The age of the foetuses was about five months.

Discussion

Clerk et al (1959), and Purushottam (1964) considered an abdominal pregnancy as advanced when the gestational age was more than 12 weeks' size. Yahia (1964) described it as advanced when of five months' age, while King (1954) considers it so only when foetus is viable. In the present study we have followed the first definition.

Naidu et al (1960) reported advanced abdominal gestation to be common in multiparous elderly women. While all our patients were fertile, three of them were below the age of thirty years. Only in one case

was the last delivery prolonged (five years), and there was no history suggestive of pelvic inflammation or pelvic surgery in any of them. Predisposing causes, therefore, remain obscure in these cases.

The importance of suspecting the condition at an early stage cannot be over-emphasised. Four out of our five patients had gone to almost full-term and if they had been diagnosed correctly, when first seen, at least in two, with babies weighing more than four pounds, it would have been possible to have a live birth. History of illness throughout the pregnancy and high blood pressure (Raju et al 1962, Upadhyaya et al 1961) though present in only two of our cases, should at once put one on guard. History of recurrent abdominal pain and discomfort with gastro-intestinal disturbances is suggestive. Diarrhoea was noted in one case, was wrongly thought to be infective and, in retrospect, may have pointed to diagnosis. History of cessation of foetal movements, spurious labour and postmaturity may be available to suggest the diagnosis.

Presence of abdominal tenderness with abnormally high lying foetus, easily palpable foetal parts with abnormal presentation may have been helpful in diagnosis of three cases. Easily palpable foetal parts may cause confusion and the case may be misdiagnosed as rupture of uterus, particularly in an institution like ours where rupture is very frequently seen. Long and firm cervix, as was found in one case, is of great value. Cervix may be displaced upwards and nosis though it should not be done as forwards with the uterus which is felt a routine investigation, particularly separate from the mass. It may be when foetus is alive.

mistaken for fibroid as happened in one case in the present series.

In advanced cases, absence of normal Braxton-Hicks uterine contractions with aid of tocographic tracing may be helpful.

Cross and his collaboraters (1951) have advocated oxytocin test as a valuable aid. After giving half an unit of pitocin, a careful watch is kept on contractions of abdominal mass by palpation. If no contractions are revealed within 15 minutes, 1.5 units are repeated subcutaneously. In intrauterine pregnancy the uterus contracts and abdominal pregnancy is ruled out. But if negative, it is inconclusive. This was not done in any of our cases.

In doubtful cases radiographic findings are of great assistance. The main diagnostic features are, an abnormally high position of the foetus above the brim with common association of malpresentation. In the present series, one x-ray did show a high transverse presentation which was missed preoperatively. Extension or acute flexion of foetal spines with distortion of foetus and bizarre shaped head may be due to pressure and oligohydramios. It does not indicate foetal death. Absence of uterine soft tissue shadow surrounding the foetus is informative.

The less typical x-ray picture is a non-pregnant uterus casting a shadow or gas in the maternal ileum abnormally near foetal skull or intermingling of foetal skeleton and intestinal shadows.

Hysterograph may give a final diag-

In the present study, gestational sac with placenta was removed complete in two cases, partially in one, while they were left behind in two cases. Hreshehyshyn et al (1961) reported the figures for removal of placenta as follows, completely removed in 64.4 per cent, partially in 6.9 per cent and left in situ in 28.7 per cent. In those cases where the placenta was left behind, no untoward symptoms were encountered later on.

Summary

Five cases of advanced abdominal pregnancy are reported. The diagnosis and management are discussed.

Acknowledgement

We are thankful to the Dean, Medical College, Baroda, for allowing us to publish this paper.

References

 Charlewood, G. P. and Culinev, A.: J. Obst. & Gynec. Brit. Emp. 62: 55, 1955.

- Clark, J. F. J. and Bourke, J.: J. Obst. & Gynec. Brit. Emp. 78: 2340, 1959
- Cross, J. B., Lester, W. M. and McCain, J. R.: Am. J. Obst. & Gynec. 62: 303, 1951.
- Hreshehyshyn, M. M.: Am. J. Obst. & Gynec. 81: 302, 1961.
- King, G.: Am. J. Obst. & Gynec.
 67: 712, 1954.
- Naidu, P. M. and Reddy, U. N.: J. Obst. & Gynec. Brit. Emp. 67: 843, 1960
- Poddar, D. L.: J. Obst. & Gynec. India. 8: 16, 1957.
- Purushottam, B.: J. Obst. & Gynec. India. 14: 872, 1964.
- Raju, G. R., Reddy, R. S. and Savitri, C. J.: J. Obst. & Gynec. India. 12: 560, 1962.
- Subhadradevi, N.: J. Obst. & Gynec. India. 11: 400, 1960-61.
- Upadhayay, S. N. and Mishra, J.: Obst. & Gynec. India. 14: 767, 1964.
- 12. Yahia, C. and Mongomery, G.: Obst. & Gynec. 8: 68, 1956.