

## ACUTE ABDOMEN IN PUERPERIUM

by

GITA GANGULY, M.B.B.S., D.G.O., M.O. (Cal.), M.R.C.O.G. (Lond)

and

S. K. DUTT,\* M.B., D.G.O., F.R.C.O.G. (Lond)

Acute abdominal emergency in puerperium is not a common phenomenon, but when it does occur the diagnosis should be made early for appropriate surgical treatment. It is not unusual for an obstetrician to have the experience of acute abdomen following abdominal or vaginal delivery which is nothing but a complication arising out of operation. On the other hand, development of acute surgical emergencies in puerperium which are apparently unconnected to the nature of deliveries are considered for review as they are not frequently seen. Common surgical emergencies occurring in puerperium are well known clinical conditions which have been described by many and reports of such cases are not lacking in Indian and world literature. The purpose of this communication is to present 3 less common cases which have hitherto not been described elsewhere.

### Case 1

A 26 year old woman, Para 2 + 0 was admitted to hospital on 23-3-78 for pain in abdomen and vomiting which had started 2 days prior to her admission. She did not also pass stool for the same duration. Her last child was born by lower segment caesarean section about 20 days previously.

\*Hony. Associate Professor and Senior Visiting Surgeon.

Dept. of Obstetrics and Gynaecology, Nilratan Sircar Medical College and Hospital, Calcutta.

Accepted for publication on 5-2-79.

On examination, her pulse was 100/min. B.P. 106/60, abdomen was distended, scar was healthy, no mass was detected, no peristaltic sounds were audible. Vaginally, no gross abnormality was found in her pelvis.

She was treated by I.V. fluid and gastric suction and a provisional diagnosis of subacute intestinal obstruction was made by the surgical specialist. Forty eight hours later, the patient vomitted out two large round worms and soon after her abdominal distention subsided. In the following morning she also passed some round worms in her stool. After receiving treatment with anthelmintic drugs she was discharged from the hospital in a satisfactory condition.

### Case 2

A 36 year old woman, Para 4 + 0 was admitted to hospital in a state of collapse on 19-1-78. Four days prior to her admission she had a normal home confinement. Ever since her delivery she kept on complaining about a dull aching pain in her lower abdomen. Her bowels did not open for the last two days.

On examination, her general condition was low pulse was imperceptible, temperature  $-102^{\circ}\text{F}$ , B.P. could not be recorded. Abdomen was distended and tender. Peristaltic sounds were sluggish. Vaginally, uterus was enlarged to about 16 weeks' size, anteverted, fornices were vaguely tender, os was open and offensive discharge was present. She was treated with I.V. fluid, gastric, suction and antibiotics. The patient was referred to surgical specialist who made a provisional diagnosis of volvulus. Laparotomy was performed 12 hours later and a large amount of free pus drained from the peritoneal cavity. Uterus and appendages had evidences of inflammation. She had no other abnormality in her abdomen. Postoperatively, the patient never recovered from the

state of shock and she died on the following day, the cause of death being acute septic peritonitis.

### Case 3

A 20 year old woman, para 1 + 0 was admitted to hospital on 12-7-77 with premature labour pains. She also complained of slight discharge of clear fluid for the past 7 days from a ruptured pustule developed on the abdominal scar of laparotomy performed 8 years previously; the cause of laparotomy was said to be gallstones. Her first child was born 2 years ago.

On examination, there was an apparently healed supraumbilical scar of about 7 inches in length. The skin over the scar was stretched and it looked like an elliptical scar with its maximum width of 1½ inches. There was a small discharging sinus at the lower end. The opening of the sinus was encircled by infected unhealthy tissue which was tender but there was no evidence of herniation. The scar on palpation was papery thin. It seemed that there was only superficial union of skin with underlying tissues unhealed and retraced to the either margins of the scar. Uterine enlargement corresponded to 30 weeks of pregnancy and presentation was breech. She delivered a stillborn premature baby 12-7-77. On 14-7-77 i.e. 2 days later the patient experienced a sudden excruciating pain at the site of discharging sinus following which she noticed something coming out through the abdominal scar. It was found that the abdominal scar had burst open and intestinal coils had come out of the peritoneal cavity.

Emergency laparotomy was carried out and after cleaning the wound, it was securely repaired. The patient made an uneventful recovery.

### Discussion

Precise recognition of the cause of acute abdominal mischief in puerperium is generally missed as the abdominal symptoms are thought to be related to the pregnancy and sometimes the signs do not give support in favour of symptoms (Munro and Jones 1975). Case 1 was diagnosed as subacute intestinal obstruction which was thought to have resulted from lower segment caesarean

section performed 20 days previously. Ascariasis is known to cause intestinal obstruction but its coincidence in puerperium is somewhat uncommon. Accidental vomiting out of round worms relieved the patient of intestinal obstruction and at the same time spared her from a laparotomy.

Sudden shock in puerperium can be due to a number of causes but in the absence of definite clinical features, it becomes difficult to pin it down to a particular one. Case 2 developed unexplained shock and she had also features of intestinal obstruction which prompted the surgical specialist to think of volvulus. However, laparotomy clinched the diagnosis of acute septic peritonitis. It may be probable that there was haematogenous spread of infection from uterus which led to formation of pus in peritoneal cavity and massive liberation of toxin from resultant bacteraemia may have produced endotoxic shock and peritonitis due to lowered resistance of the patient. This possibility is quite in conformity with the observations made by Brian Little (1967). Large amount of intraperitoneal haemorrhage from rupture of hepatic cell adenoma on the fifth day of puerperium has been reported to have caused sudden shock and ultimately death (Hayes *et al*, 1977). According to Munro and Jones (1975) volvulus is considered to be a cause of intestinal obstruction in puerperium due to adjustment of abdominal viscera following parturition.

Acute abdomen in puerperium resulting from bursting of a previous laparotomy scar is not only unusual but also highly uncommon. Peculiarly enough the weak abdominal scar of laparotomy in Case 3 withstood the strain of labour pains efficiently just to give way 48 hours after delivery. It may be that the infec-

tion of the abdominal scar established a minute communication to the peritoneal cavity leading to leakage of small amount of peritoneal fluid. It is also wondered if the rise of corticosteroids in pregnancy is related to the dehiscence of the abdominal wound as observed by one of us (Dutt 1974) in the study of incisional hernia. Still it cannot be explained adequately why this scar ruptured in puerperium and not at the height of uterine contractions during the second stage of labour.

Apart from Case 3, the other 2 cases had diagnostic difficulty. It seems that the problem in this connection faced by the obstetrician crops up either due to lack of familiarity with surgical emergency or due to apparent absence of correlation between symptoms and signs. Although some amount of afterpains are normally expected following a delivery, yet the possibility of a surgical condition should always be borne in mind. Munro and Jones (1975) suggest that anything more than intermittent mild colicky lower abdominal pain is abnormal in puerperium. Careful analysis of degree of degree of abdominal pain and tenderness

may give a clue to a possible surgical disease in puerperium.

#### *Summary*

Acute surgical emergency in puerperium is not common and its manifestations may be confusing to make the diagnosis difficult. Three such cases of unusual nature have been discussed. Greater awareness of these conditions may help to differentiate early an abnormal puerperium from a normal one.

#### *Acknowledgement*

We wish to thank Col. M. Sarkar, Supdt. of N.R.S. Medical College and Hospital for allowing us to use the case records. Our thanks are due to Dr. Bela Banerjee for her untiring help in preparation of this paper.

#### *References*

1. Brian Little: *Advances in Obstetrics & Gynaecology*, Vol. I William & Wilkins Baltimore 1967.
2. Dutt, S. K. J. *Obstet. Gynec. India*. 24: 188, 1974.
3. Hays, D., Lamki, H. and Hunter I. W. E.: *Brit. Med. J.* 2: 1934, 1977.
4. Munro, A. and Jones, P. F. *Brit. Med. J.* 4: 691, 1975.