"BABY IN THE BLADDER AFTER RUPTURE OF UTERUS"

(Report of 2 cases)

by

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Cervix being in close proximity with the bladder, the stress and strain of normal labour is borne by the bladder without any serious damage to it. But rupture of the bladder with baby escaping into it, along with rupture of the lower segment has been reported 7 times only in the World literature.

Historical Aspect

Morgan in 1960 reported a case from Saudi Arabia, where he found the foetus expelled into the overstretched vagina and was retained there as a result of outlet contraction of the pelvis. Mahfauz in 1932 reported a case where the cervix was completely amputated at the level of the internal os. Subhadra Devi in 1962 found the cervix tubular and was almost amputated and the baby weighing 5 lbs was in the overstretched bladder, the roof of which was torn transversely. Bird in 1964 from Kenya had a case of transverse lie with arm prolapse, where the remaining part of the baby was in the bladder with the arm prolapsed outside; the baby weighed 8 lb. 4 ounces, wherein he repaired the rent and left the uterus behind. Gogoi in 1968 found the right arm, shoulder and part of the foetal trunk escaping into the bladder with colporrhexis of the anterior vaginal wall and vertical tear of the bladder. Shah *et al* in 1970 also had a similar cases of transverse lie with a vertical tear in the bladder and the baby weighed 6 lbs. Recently, Parekh and Sharla in 1971 reported a case wherein the head of the second foetus of the twins escaped into the bladder.

CASE 1

Mrs. L. aged 35 years, gravida 3, was admitted on the morning of 17-3-1971 at 11-30 A.M. She was in labour for 32 hours and after 14 hours of labour pains, she had an acute attack of pain in the abdomen followed by sudden cessation of pain and stoppage of foetal movements. There was no history of interference and she had no bleeding after the attack of pain and was not aware of the rupture of the membranes also. She complained that she had not passed urine for the last 18 hours, that is ever since she had the episode of acute pain abdomen, and now she complained of retention of urine.

First pregnancy was full term with history of prolonged labour, the delivery was conducted at home and the baby died on the third day. The second pregnancy was also full term and gave a history of prolonged labour and the baby died on the same day. The birth of the last child was 12 years ago and the puerperal period was afebrile.

On admission she was in a state of shock, tongue was dry and coated. B.P. was very low 60/?. Pulse was rapid and thready 120/per minute. Respirations 30/mn. temperature normal, Hb 8 gms%, blood group 'O'.

Abdominal examination revealed an unduly prominent mass in the lower abdomen

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extending upto the umbilicus resembling a distended bladder, with another firm mass situated high up in the abdomen in the right hypochondrium. Foetal parts were not made out, the usual contour of full term uterus was absent and foetal heart sounds were absent.

Vaginal examination showed no evidence of external bleeding, the catheter could be passed into the bladder with great difficulty and only a few drops of thick meconium stained blood tinged urine was drawn. The foetal head was lying jammed in the pelvis with a large caput and foul smelling discharge. The posterior lip of the cervix was found hanging lose with 8 cm dilatation and anterior lip was drawn up. We immediately suspected that this must be one of the rare cases where the foetus had escaped into the bladder as we could draw only meconium stained urine containing blood.

OPERATION

Abdomen was opened by midline subumbilical incision. There was no free blood in the peritoneal cavity. The uterovesical fold of peritoneum was drawn up to the level of the umbilicus, oedematous and badly ecchymosed, but was completely intact with no evidence of complete rupture. The uterus was contracted, empty, and was lying high up in the right hypochondrium beneath the liver. A transverse incision was made high up between the symphysis pubis and the uterovesical fold of peritoneum, a very much thinned out mucous membrane like layer was incised and the back of the baby came into view (Fig. 1). On removing the baby and the placenta which was lying inside the uterus, the rubber catheter previously kept inside the bladder was seen. On further exploration we discovered that what we incised was the bladder wall and posteriorly there was a transverse rent in the bladder and the lower uterine segment had completely given way in its anterior aspect transversely in the same line as the bladder laceration. This simultaneous tear of the anterior lower segment of the uterus and posterior wall of the bladder had allowed the body of the baby to escape into the bladder, with its head deeply jammed in the pelvic cavity. A rapid subtotal hysterectomy was done and the bladder was closed with difficulty in two layers. All stumps were peritonised and abdomen closed in layers keeping a corrugated rubber drainage. Patient started recovering on the table but soon she became bad in the postoperative ward and expired on the same day at 2.20 PM., 3 hours after admission. The baby weighed 7 lb 2 ounces.

Biopsy report: Biopsy of the layer from the site of incision was taken to confirm the fact that what we incised was bladder.

Case 2: Mrs. P. aged 25 years, 3rd gravida was admitted on 19-8-1971, with a history of labour pains since 5 A.M. and history of haematuria since 7 A.M.

Previous history: First pregnancy 5 years ago was full term, had prolonged labour and the baby was stillborn. Second pregnancy was 2 years ago. Full term normal delivery. Baby died soon after delivery.

Present pregnancy: Patient was brought to this hospital at midnight in a moribund state. Temperature 99°F. Pulse imperceptable. Respirations 30/mn., B.P. 60/?, Hb 50%, blood group 'A'. The doctor who saw her at 12 noon on 18-8-1971 gave the history that the patient who had her pains since 5 A.M. ruptured her membranes at 7 A.M. and since then she was not able to pass urine. She was given pitocin by the local doctor at 12 noon i.e. 7 hours after the onset of labour pains and he could not catheterise any urine excepting for few drops of blood.

On admission: At 12.40 A.M. the patient was in shock, very pale, pulse was thready and imperceptible. Uterine contour was lost, abdomen was uniformly distended on palpation, foetal parts were felt superficially with tenderness all over the abdomen.

Vaginal Examination showed cervix to be 5 cm dilated, membranes absent. The lips of cervix were thick and hanging loose. Bleeding per vagina was present. On catheterising, the patient, only few drops of frank blood was drawn.

A provisional diagnosis of rupture uterus with rent in the bladder was made

After giving 3 bottles of blood, 1 bottle of glucose saline, 1 bottle of Periston and all the resuscitative measures with nor-adrenaline 8 mg, hydrocortisone 50 mg I V.

the blood pressure rose to 110/70 at 3 A.M. and at 4 A.M. when blood pressure was maintained at 120/80 she was taken to the theatre for laparotomy.

Operation findings: On opening the peritoneal cavity placenta came into view along with blood clots. On removing the placenta, foetus was found lying free in the peritoneal cavity with head in the bladder. There was a transverse rent in the lower uterine segment extending upto right round ligament. The catheter kept in the bladder was seen lying close to the head of the foetus. Uterus was contracted and pushed to the left. Both adnexae were hemorrhagic. Bladder was irregularly torn with the foetal head in it (Fig. 2). Quick subtotal hysterectomy was done. Multiple tears in the bladder wall were closed and abdomen was closed in layers. As a group blood was not available, fourth bottle of 'O' group blood was given on the table. Blood pressure after operation was 110/70, pulse 120/mn. volume and tension fair. On 20th afternoon, patient suddenly became bad at 12 noon and expired at 2 P.M. on the same day.

Comments

In the 12 year period from 1960 to 1971, we had a total number of 146 cases of rupture uterus. Within an interval of 5 months, we had two cases of rupture uterus with baby escaping into the bladder.

In the first case there was an incomplete rupture of uterus and the whole body of the baby, excepting the head, had escaped into the bladder.

In the second case, there was a complete rupture and only the foetal head was in the bladder.

In the first case the baby weighed 7 lb. 2 oz and in the second case the weight of the baby was 7 lb 5 oz.

The bladder must have been full and distended at the time of rupture and that must have facilitated the foetus to escape into its cavity. Being aware of this rare possibility and having got meconium stained blood-tinged urine and a history of not having passed urine for the last 18 hours, an immediate preoperative diagnosis of rupture uterus with rupture of the bladder was made in both the cases. It is rather very unfortunate that both the patients come so late in labour and in so bad a state of shock that we could not revive them after the operations.

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References

1. Bird, G. C.: J. Obst. & Gynec. Brit. Cwlth. 66: 967, 1964.
2. Gogoi, M. P.: J. Obst. & Gynec. India, 18: 130, 1968.
3. Parekh, P. and Sharada, P.: J. Obst. & Gynec. India, 21: 758, 1971.
4. Mahfouz Bay, V.: J. Obst. & Gynec. Brit. Emp. 39: 742, 1932.
5. Morgan, I. I.: Am. J. Obst. & Gynec. 79: 1107, 1960.
6. Shah, et al: J. Obst. & Gynec. India, 20: 666, 1970.
7. Subhadra Devi, N.: J. Obst. & Gynec. Brit. Cwlth. 69: 140, 1962.

See Figs. on Art Paper I