INTRA-PARTUM HAEMORRHAGE DUE TO RUPTURE OF AN UMBILICAL VESSEL IN A FOETUS WITH AN OMPHALOCELE

(A Case Report)

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The congenital abnormality known as omphalocele, or alternatively as amniotic hernia and exomphalos, is a condition in which there is complete failure of development of the anterior abdominal wall. Its occurrence is estimated at 1 in 6000 births and is often accompanied by other types of abnormalities.

There are various degrees of failure of development of the anterior abdominal wall starting from simple umbilical hernia and ending with omphalocele where the entire abdominal contents are covered only by a thin transparent and avascular membrane.

This condition presents a serious paediatric problem as, unless the defect is repaired immediately, the membrane cracks and dries, to be soon followed by infection and death. The repair of such a defect, on an average 10 cm. in diameter, is naturally extremely difficult on account of the lack of available tissues with which to construct a new abdominal wall. Hollenberg reports four such cases in which repair was effected but the resulting deformity was so great that three infants died in the second year of life while the fourth was lost trace of.

Little or no mention is made in text books of Obstetrics on this condition. The reason is probably, firstly, on account of its rarity, secondly, it almost invariably results in foetal death and thirdly, it causes no maternal complications during pregnancy and labour. A search through the literature reveals one case report where the condition of omphalocele, with absence of the umbilical cord, caused obstructed labour.

Fist, while reporting a case of intrapartum haemorrhage from the cerebral vessels of an anencephalic foetus, points out that intra-partum haemorrhage of foetal origin is rare.

Case History

Mrs. S. R. C. aged 25, gravida 2 para 1 first seen on April 16th, 1955, and she had had no previous ante-natal care. Her first delivery two years previously was normal. She appeared to have a moderate degree of anaemia and complained of a feeling of weakness. The blood pressure was 100/60 mm. of mercury and there was no albuminuria and no oedema. Her last menstrual period was on August 22nd, 1954 and the estimated date of delivery May 29th, 1955. The height of the fundus corresponded with that of a 30 weeks' pregnancy, whereas the term was actually 34 weeks. Her menstrual cycle had previously been a regular 28-day one and the patient was certain about the date of her

last menstruation.

On examination the breech was found to be presenting and the foetal heart sounds were irregular.

A gentle attempt was made at external version but, as there was found to be a rather unusual degree of immobility for such a small foetus, the attempt was abandoned. The patient was referred for a haemogram and an X-ray, the latter in a search for some explanation for the foetal immobility. On April 18th, 1955, at 9 a.m. before the X-ray or the haemogram had been done, the patient was admitted to the nursing home with a history of bleeding per vaginam since 4 a.m. About one hour previous to her admission she had noticed slight painful contractions recurring every 5-10 minutes. On examination the bleeding was found to be steady and fairly profuse though not alarming. Her general condition was good and the pulse rate and volume were unaltered.

After careful preparation a vaginal examination was made and revealed a cervix that was effaced, the os was 3 fingers dilated and was entirely occupied by a fleshy mass. A diagnosis of central placenta praevia was made and it was decided to perform a lower segment caesarean section.

During the time required for preparation of the patient and for securing blood for transfusion, the pains were becoming much stronger while the bleeding was slightly less. For this reason at 12-30 p.m. when the patient was fully anaesthetised and ready for operation, a second vaginal examination was done. The os was now fully dilated, the right half only was occupied by the fleshy mass, while through the left half, a hand was prolapsed. When the hand was replaced the buttocks presented and the feet were brought down. During these manipulations the anaesthesia had been lightened and there was practically no bleeding. Slight traction was made on the legs with each pain and pitocin 2 mm. was administered to the patient. As soon as the buttocks were born it was seen that the abdominal wall of the foetus was absent revealing the whole of the abdominal contents including the liver which was enlarged. It is presumed that it was the enlarged liver which was originally presenting and mistaken for the placenta. The remainder of the foetus was born rapidly and the placenta was expelled without further abnormal bleeding. There was no umbilical cord. The patient received 500 ml. whole blood during the above procedure and made an uneventful recovery.

The baby gasped a few times after birth but on account of the multiple congenital abnormalities no effort was made at resuscitation.

Autopsy.

The foetus weighed 5½ pounds and was of a development consistent with a 34 weeks' gestation. There was a complete absence of the anterior abdominal wall from the costal margin to the symphysis pubis. The amnion was torn through leaving completely exposed the liver, spleen, stomach, small and large bowel. The amnion was adherent to the thin wall of the sac of the omphalocele and the umbilical vessels could be seen traversing the sac on one side. The umbilical vein was traced to the liver.

The umbilical cord was completely absent.

There was a large meningocele about 7.5 cm. in diameter arising from the lumbosacral region. The right hip showed a forward dislocation and the left one a backward dislocation while there was a marked calcaneo–varus deformity of both feet. On ordinary dissection it was not possible to determine the sex of the foetus.

Comments

An accurate diagnosis, by means of the various roentgenological techniques now available or by a careful vaginal examination under anaesthesia, will help to eliminate rare, though unnecessary, caesarean sections for haemorrhage due to foetal conditions incompatible with life.

Summary

1. A case of intra-partum haemorrhage at 34 weeks, initially diag-

nosed as placenta praevia, is presented.

2. The haemorrhage was from an umbilical vessel presumably ruptured during an attempt at external version.

3. The foetal abnormalities, including the condition known as omphalocele, are described.

References

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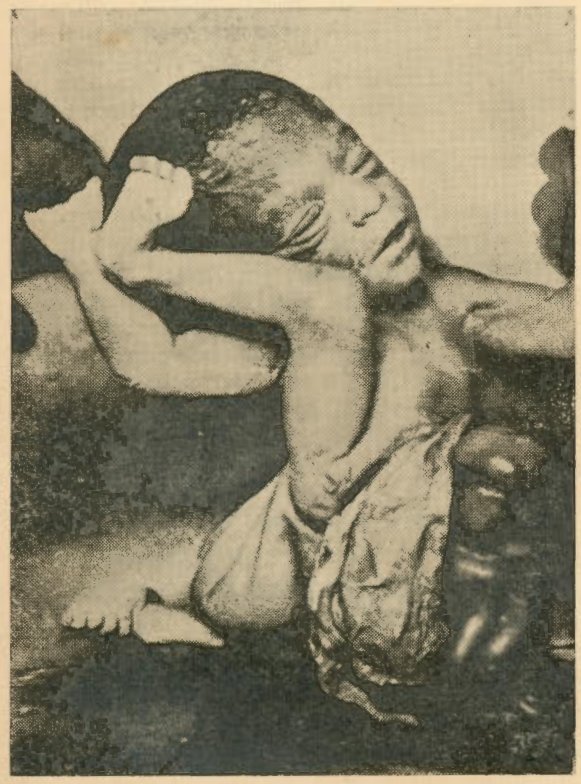

Fig. 1
Lateral view of foetus showing the torn amnion, liver and other abdominal contents, meningocele and deformities of the lower limbs.

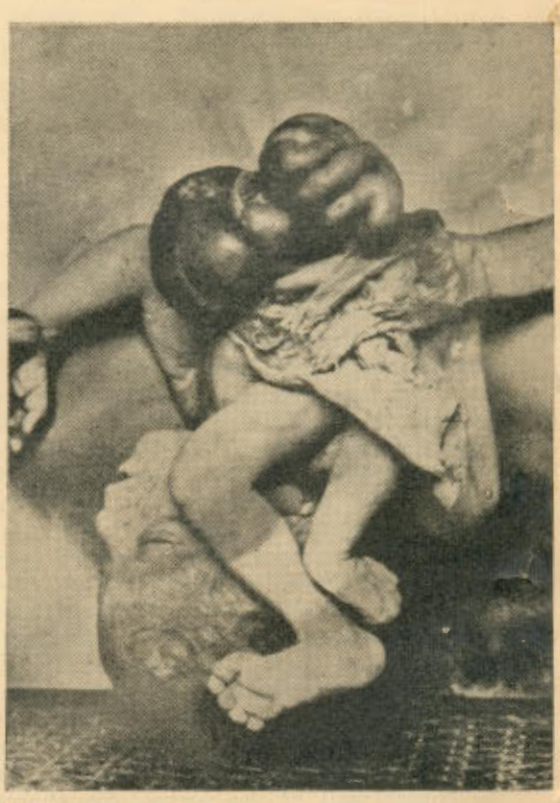

Fig. 2
Anterior view of the same. The dislocation of the lower limbs appears exaggerated due to previous immersion of the foetus in formalin solution.