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Case Report

LOCKED TWINS - A RARITY: CASE REPORT

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ABSTRACT

Locking of twins is a catastrophic complication usually recognized in second stage of labour and fortunately occurs rarely, 1 in 90,000 deliveries or 1 in 1000 twin deliveries. A 20 years old primigravida at 37 weeks gestation presented to the gynaecological casualty of our institution. She presented in second stage of labour with breech lying outside the introitus delivered upto the umbilicus and the cord pulsations were absent. Further examination revealed a case of suspected breech vertex interlocked twins. Fetal heart of twin B was faintly heard upto 98 beats/min. As the interlocking was so tight, could not be disimpacted and the fetal distress of twin B, the decision for LSCS was taken. Intraoperatively interlocking was confirmed, twin B was extracted as breech first and the after coming head of the twin A was delivered vaginally. Postoperative period was uneventful and the mother was discharged with one baby. Management has to be individualized, LSCS is the best management for breech-vertex twins before the onset of labour to avoid the rare complication of interlocking twins.

Keywords: Interlock twins, Second stage of labour, LSCS

INTRODUCTION

Locking of twins is a catastrophic complication usually recognized in second stage of labour and fortunately occurs rarely, 1 in 90,000 deliveries or 1 in 1000 twin deliveries [1]. It is thus felt justifiable to report this case of breech-vertex interlocking of twins.

CASE REPORT

A 20 years old primigravida at 37 weeks gestation presented to the gynaecological casualty of our institution. It was a spontaneous conception and her antenatal period was unsupervised although uneventful. She presented in second stage of labour with breech lying outside the introitus delivered upto the umbilicus and the cord pulsations were absent. Both the arms of baby were delivered but the delivery of the after coming head was not possible. Further examination revealed a case of suspected breech vertex interlocked twins (Fig. 1), where the head of twin B engaged in left occpito-anterior compressing the neck of twin A, while the head of twin A was above the pelvic brim. Fetal heart of twin B was faintly heard upto 98 beats/min.

As the interlocking was so tight, could not be disimpacted and the fetal distress of twin B, the decision for LSCS was taken.

Intraoperatively interlocking was confirmed, twin B was extracted as breech first and the after coming head of the twin A was delivered vaginally.

There was a single sac, single placenta weighing 750 gm and thin meconium stained liquor. Both babies were females, twin A was 1.15 kg fresh stillborn and twin B was 2.5kg alive and her APGAR was 6/10 and 8/10 at 1min and 5min respectively. Postoperative period was uneventful and the mother was discharged with one baby.

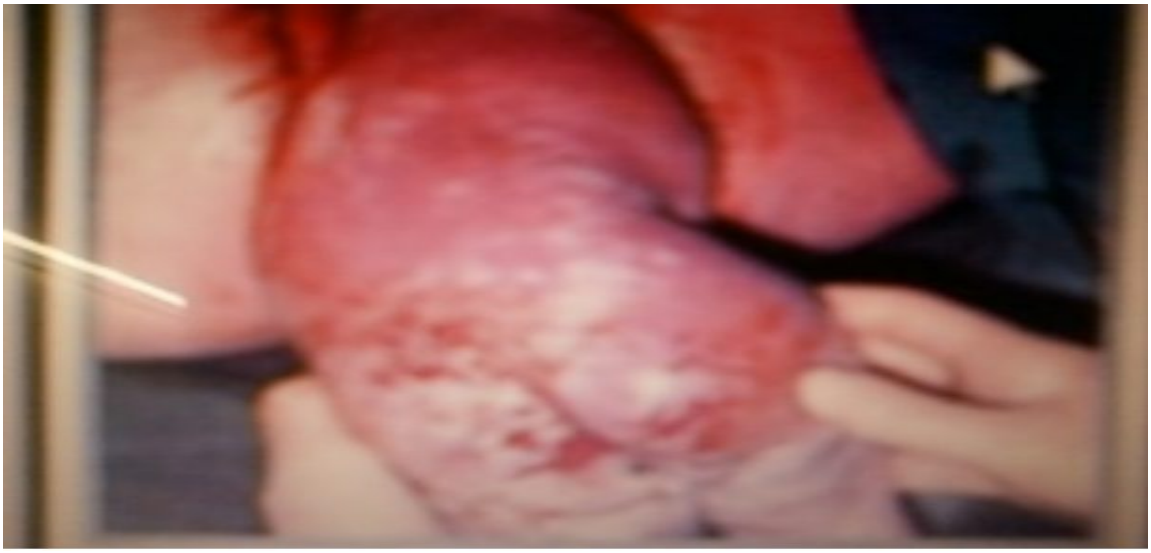

Fig. 1: Locked twins

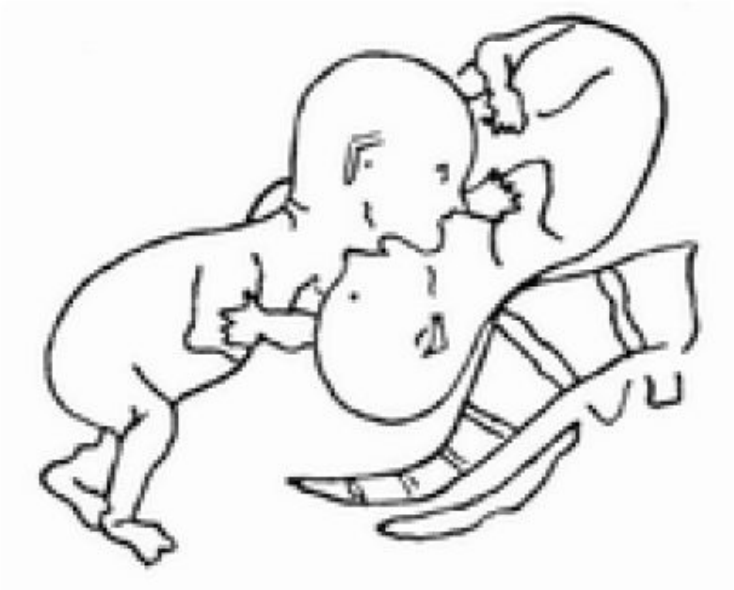

Fig. 2: Positions of the 1st twin breech and the 2nd twin vertex – chin to chin interlocking

Fig. 3: **Assistant's hand holds the extremities of the undelivered breech while the Piper forceps are applied below to the vertex of the 2nd twin**

Fig. 4: **Positions of the two heads at the completion of delivery of the vertex of the 2nd twin**

Fig. 5: **Maneuver producing simultaneous delivery; arrows show the direction of the manual traction to be used**

DISCUSSION

Locking of twins has been classified by Nissen into four categories [2]:
Group 1 - baby A is breech and baby B is vertex.
Group 2 - both babies are vertex.
Group 3 - baby A vertex and baby B is transverse.
Group 4 - both baby A & baby B are breech.

Interlocking chin to chin belongs to group 1 (Fig. 2), is the intimate adhesion of inferior surface of a twins chin with that of its co twin at above or below the pelvic inlet. Our case belongs to this category.

Predisposing factors in the etiology of interlocking of twins could be small fetuses, roomy pelvis, oligohydramnios, monoamniotic twins, hypertonicity and frank breech is associated with increased risk of interlocking than extended breech because it prevents close contact between head and chin. Most important factors are age and parity of the mother, 77% of mothers are less than 30 yrs and 72% of locked twins mothers are primigravidas [2]. Our case had both of these etiological factors.

Perinatal mortality for twin A is high 60-80%, twin B has far better outlook provided interlocking is of short duration and there is no delay in the delivery. Fox and colleagues reported no perinatal death if caesarean section was done initially in the anticipated locked twins and 33%mortalityif caesarean was done after vaginal delivery has failed [3]. If section done prior to the descent of twin A the outcome is favourable [3,4,5].

Treatment has to be individualized, if both the fetuses are alive and interlocking is diagnosed early, LSCS is the best management. Disengagement could be attempted first preferably under deep anaesthesia. Disengagement proves helpful in early cases where there has been no traction on the buttocks and interlocking occurred at or below the level of ischial spine. Unique method of simultaneous delivery of chin to chin locked twins using Piper forceps has been illustrated by Kimball & Randall Fig 3, 4, 5 [6].

Decapitation of the first dead twin was practiced earlier, however LSCS was done particularly if it was felt that decapitation would lead to greater maternal trauma. Johannesburg, SA reported a case where locked twins were born vaginally after hexoprenaline sulphate, a beta sympathomimetic drug was used to relax the uterus so that the fetal heads could be disimpacted [7]. Successful outcome has been found after applying the zavanelli maneuver [8].

CONCLUSION

Our case was unfortunate not only because of rarity of the condition but also she being unbooked and presented late in the labour. Management has to be individualized, LSCS is the best management for breech-vertex. Twins before the onset of labour to avoid the rare complication of interlocking twins.

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