EXTREME HYPEREXTENSION OF THE HEAD IN BREECH PRESENTATION WITH FOETAL ANOMALY

(A Case Report)

by

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Cases of extreme foetal deflexion have been mentioned as early as sixteenth century (Denny, 1951). Brans and Cassady in 1975 surveyed world literature and found the total number of reported cases of hyperextension of the foetal head in breech presentation, since 1910, to be only 99. The condition being very rare, its incidence, etiology and proper management is not clearly known to us. Scanty references relating to this problem as available in standard obstetric textbooks and recent literature prompted us to report this case here.

CASE REPORT

Mrs. M. Roy, aged 21 years, primigravida was a booked patient at the antenatal out-patients department of Ramkrishna Mission Seva Pratisthan, Calcutta. She was married on 14th July, 1975 and her L.M.P. and E.D.D. were on 29th July, 1975 and 4th May, 1976 respectively. She was of average build and nutrition with a blood picture within normal limits. She had no features of toxaemia and was diagnosed to have breech presentation at 32 weeks. At 34 weeks external cephalic version was tried at the out-patients department but failed on 3 successive occasions. Straight X-ray of the abdomen and pelvis was advised.

The X-ray at 38th week (Fig. 1) revealed a single foetus with longitudinal lie, presenting by breech with a grossly extended head lying at the right cornu of the uterus. The limbs could not be visualised—only a small upper limb-bud (arrow mark in Fig. 1) was delineated after careful inspection of the different X-ray views taken (AP, PA, lateral and oblique). A severe degree reduction deformity of the extremities (Micromelia or Phocomelia etc.) was diagnosed and deliberate allowance of vaginal delivery was planned instead of caesarean section considering the foetal deformity with an idea to perform destructive operation for the extended after-coming head in case of arrest during labour.

On enquiring about the past history, she stated to have suffered from typhoid fever 1 month before her marriage and her family history was non-contributory.

She was admitted on 12th May, 1976 morning with labour pain. Another straight X-ray was taken which showed the same features as before. Foetal heart was good all along and within 12 hours the cervix was fully dilated and taken up. Delivery up to the shoulders was spontaneous with a liberal medio-lateral episiotomy under local anaesthesia but the after-coming head got arrested quite high up above the pelvic brim and was extended. All manoeuvres to deliver the after-coming head had failed and by this time cord pulsation had also stopped. Destructive operation was now decided upon and under

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general anaesthesia, as the occipital region was out of reach, craniotomy was done through a cleft in the hard palate. After draining out some amount of churned brain matter, traction on the shouders caused descent of the head in the pelvic cavity and it was ultimately delivered by jaw-flexion-shoulder-traction manoeuvre. This was followed by spontaneous expulsion of the placenta with entire membranes. Uterus was explored and no uterine abnormality was detected. There was no P.P.H. or any injury to the cervix, vagina or perinium. The episiotomy was repaired in layers. Continuous bladder drainage was employed for 48 hours and the patient had uneventful puerperium. She was discharged in good condition on the 10th postpartum day.

The male foetus (Fig. 2) weighing 2.1 kg with a crown-heel length, 38 cms, had a big head with a bulging forehead. The trunk was small in comparison to the head and the limbs were extremely small and knobby. The testes were normally descended in the scrotal sac. There was no other recognizable external deformity. An X-ray of the dead foetus (Fig. 3) revealed the long bones of the extremities including the metacarpals and metatarsals to be very short and broad with remarkable epiphyseal deformity. The vault of the skull was large with a broad spacious calvarium tapering down to a narrow base; gas-shadow seen within the cranial vault was the result of craniotomy. It was diagnosed to be an achondroplastic foetus with cleft plate. The small placenta weighing 325 gms without any obvious abnormality had a centrally attached umbilical cord, 21 cms in length, having 2 arteries and 1 vein.

Discussion

The incidence in this hospital is very very low. Review of all the 131 antenatal X-rays done in breech presentation, out of about 31,000 confinements since 1971 till this date, showed this to be the only case of hyperextension of the foetal head. Brakemann in 1936 reviewed 191 X-rays of breech presentation and found 15% with hyperextension of the foetal head. Wilcox in 1949 gave the figure as 11.7% out of his 216 X-rays of breech presentation. Bhagwanani *et al* (1973) and Ballas and Toaff (1976) have also said that hyperextension of the foetal head in breech presentation is more common than is generally supposed. No contemporary Indian statistics is available from the literature for comparison.

The possibility, that a radiologically undetectable congenital abnormality may be present in a grossly hyperextended foetus, may deter an obstetrician from performing caesarean section (Bhagwanani *et al* 1973). But in our case it was diagnosed well ahead by X-ray to be a case of extreme hyperextension of the foetal head in breech presentation with some congenital deformity of the extremities of the foetus. It was thought to be a case of recessive deformity; phocomelia or micromelia etc. and with this idea vaginal delivery was deliberately decided even to do a destructive operation on the after-coming head, if necessary. Labour was spontaneous upto the shoulders and the arrested after-coming head was delivered by craniotomy. After delivery, the baby was diagnosed to be achondroplastic.

Summary

A case of extreme hyperextension of the head in breech presentation in an achondroplastic foetus, which has been delivered by craniotomy, is presented. The incidence, etiology and management of this rare condition is discussed with some reference to the literature.

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See Figs. on Art Paper VIII-IX