# SPONTANEOUS DELIVERY OF CONJOINED TWINS AT TERM\*

by

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Spontaneous delivery of conjoined twins is not uncommon. In most of these cases the babies were either premature or macerated. This particular case is of interest because the conjoined twins were born at term, without any surgical interference, and also because of the particular mechanism involved in the delivery.

Shaw (1943) has reported a case of conjoined twins born alive, at term weighing 11 lbs 8 ozs. But the mechanism of delivery in his case was different from the case reported here. In Shaw's case one of the heads was born first, the other in the mean time occupying the space between the chin and chest of the leading foetus, then the two bodies came out simultaneously. In the present case the twins were born rotated with respect to each other, the first was born as vertex and the other as breech. Recently Chaphekar and Chaphekar (1966) have reported assisted delivery of a case of conjoined twins, (weighing 11 lbs 2 ozs) where the mechanism of delivery was identical with this case. They have given a vivid description of the mechanism step by step as they could follow the case from the early stages of the labour. Ian Aird (1954) also has reported one case with a

\*\*Military Hospital, Allahabad. Received for publication on 30-12-67. similar mechanism, but the combined weight of the babies in his case was only 7 lbs 13 ozs.

#### Case Report

Mrs. S., aged 32 years, came to the outpatient department of Sree Avittam Thirunal Hospital, Trivandrum, on 3-3-64 at 10.30 A.M. referred from a local hospital. Labour started the previous night at 10 P.M., when she was admitted at the local hospital. By 7 A.M. on 3-3-64, the head was born. As there was no further progress, the case was referred to this hospital. Details regarding the obstetric findings early in labour could not be obtained.

She was a 6th gravida with five previous full-term normal deliveries. The expected date of delivery was March 17th.

#### On examination

She was of average build. Her tongue was dry, temperature was normal, pulse was 120/minute and blood pressure was 100/60 mm. Systemic examination revealed no abnormality.

Obstetric findings:— She was getting uterine contractions every 2 to 3 minutes lasting 40 to 50 seconds with good relaxation in between. The abdomen was unduly large: Presentation and position could not be made out definitely due to the strong frequent contractions. The foetal heart sounds were not heard.

The head could be seen outside the vulva and was bluish. The patient was taken to the theatre for a detailed examination under anaesthesia, and to decide the mode of delivery. Before she was put under anaesthesia, it was found that labour was progressing further; the baby was born up to half of the trunk. With further contractions the back of the baby was seen

advancing and ultimately the limbs were born. It was then observed that the abdomen of the baby was continuing up to the uterine cavity. With a few more contractions the breech of a second baby could be seen at the vulval outlet. The delivery could then be completed easily, as in an assisted breech delivery. The placenta was expelled within 5 minutes. There was no abnormal bleeding. Examination of the genital tract after delivery did not show any evidence of injury.

The combined weight of the babies was 11 pounds 8 ounces. Both babies were female and were still-born. They were found to be united to each other in the region of the abdomen. (Fig). There was no bony union. The flexibility of the abdominal union could be demonstrated as the babies could be rotated easily with respect to each other about the common abdominal axis.

The placenta was single and weighed 2 pounds and 2 ounces. The placenta was attached by a single cord to the lower part of the common abdominal wall, where it formed a small exomphalos.

Detailed anatomical study of the conjoined twins could not be undertaken as the parents were not willing for a post-mortem.

The mother had an uneventful puerperium.

### Comment

Conjoined twins are always of great obstetrical interest, not only because of their rarity and anatomical curiosity, but also because of the problem of antenatal diagnosis and the difficulties in management. The subject has assumed added importance since Ian Aird (1954) has shown the possibility of surgical separation of these twins.

Several papers (Bhargava et al 1960, Shah 1960, Soonawala and Patel 1960) have appeared with a review of the literature in the Indian journal discussing the inci-

dence, methods of classification, problem of antenatal diagnosis, management and anatomical description of these monsters.

The mechanism of delivery in the present case was interesting. The twins were born rotated with respect to each other, the first as vertex and the second as breech. When and what brings about this rotation of one over the common abdominal axis is intri-The guing. presentation have been both vertex or both breech to start with. Considering that both were breech before rotation took place, the mechanism can be explained on the principles of equilibrium. The axis about which rotation took place being situated at the lower end of the trunk of the foetus, any mild disturbance of equilibrium would favour such rotation and this can occur before or during labour. But, on the other hand, if both were presenting as vertex to start with, the rotation of one of them upwards to assume a breech presentation is possible only in labour; the possible course being, that the foetus progressively descends into the pelvis, the cephalic end of the second meets with resistance of the brim of the pelvis, which exerts a constant upward force on the second, favouring its rotation to assume a breech presentation. This seems to have been the mechanism in this case. The delay in the delivery of the first baby could have been due to the delay in effecting the rotation of the second baby to a breech, and once this was achieved, the delivery progressed and was completed quick-

The essential factor permiting such rotation is the soft elastic abdominal

union, without any bony connection Acknowledgement beween the two foetuses.

But for the mechanism, the case would have resulted in an obstructed labour with all its serious complications. It is to be noted that the delivery whereby the first baby was born head first and the second breech, is the most advantageous, as this helps to deliver the conjoined twins, one after the other, with the minimum stretching of the connecting band. The part to be negotiated through the pelvis along with the common abdomen being the soft compressible breech, the chance of obstruction was minimal.

Though in this case the twins were still-born, the mechanism is not necessarily associated with foetal death. In a very similar case of conjoined twins, born rotated with respect to each other, both were alive and Ian Aird (1954) effected a successful separation.

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