

## CONJOINED TWINS

### (A case Report)

by

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Double monsters have been known and recorded since antiquity. Conjoined twins or Siamese twins or symmetrical disomata are very rare varieties of congenital abnormalities seen in obstetric practice. The term "conjoined" is used to include a great variety of twins monstrously joined, and has included partners who have shared various combinations of head, trunk and limbs. The following case report is interesting as it was diagnosed during labour.

#### Case Report

Mrs. K. S., 42 years from Veergaon, was admitted on 11-10-1969 at 8.30 a.m. with the history of amenorrhoea of seven months and labour pains since 2 a.m. on 11-10-1969. She was seen by a local doctor who convinced her that everything was normal. She started getting strong pains from 4 a.m. on 11-10-1969 and membranes ruptured at 5 a.m. on the same day. In spite of strong pains, when there was no progress of labour the same doctor was called who after examination told her to go to the Medical College. On the way to Medical College, Nagpur, the legs of the foetus came out.

**Obstetric History:** She was 7th gravida, 5 full term normal deliveries at home, out of which four were alive and well; and one abortion of three months gestation at home 10 months back.

**Menstrual History:** Patient had only one

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period after the last abortion in March.

Husband's vasectomy was done six months back. There was no history of twins in the family.

On examination, she was a moderately built woman. Her general condition on admission was good. Her pulse was 84 per minute, blood pressure 100/60 mm. of Hg., afebrile, no oedema feet, and slight pallor was present. Systemic examination did not reveal anything abnormal. Examination of the abdomen revealed that the uterus was overdistended and 34 weeks' size. It was tense on palpation and the presentation and position could not be made out properly; foetal heart was not audible. Patient was getting strong pains. Vaginal examination showed that two legs were hanging out of the vaginal introitus, cervix was fully dilated, loops of cord were felt in the vagina with absent pulsations, and the pelvis was adequate. Looking at the size of the legs which appeared too small for the size of the uterus, a diagnosis of twin pregnancy was made. As there was no progress of labour with strong uterine contractions, traction was applied to the two legs which were hanging out of the vaginal introitus. Another pair of legs came out with the loops of cord. When traction was given to both the pairs of legs the whole body was delivered fairly easily. Placenta and membranes were delivered completely. There was no post-partum haemorrhage. Intravenous methergin .2 mg. was given after the placenta and membranes were out.

It was a male conjoined twin with four upper extremities, four lower extremities, fusion from the head to the upper part of the abdomen upto the umbilicus and two separate pelves (Fig. 1). There was a big gap in the anterior abdominal wall where the umbilical cord was attached (Fig. 2).



There were one pair of ears on the side of the head and one pair at the back very close to each other (Fig. 3). It was a synccephalus thoracopagus monster. The weight of the foetus was 5 lbs. 2 ozs. Placenta was a large single one with only one cord attached in the centre of the placenta. Length of the cord was 14 inches. Weight of the placenta was 1 lb. 12 ozs. (Fig. 4).

#### Autopsy findings

(1) Cranial cavity showed the presence of separate pons and medulla with the fourth ventricle exposed on the posterior aspect. There were two optic chiasmata—one well developed and one rudimentary.

(2) Mouth cavity showed all single structures.

(3) Thorax—

(a) Oesophagus—One.

(b) Trachea—Two.

(c) Lungs—four—anterior pair undeveloped, but posterior well developed.

(d) Hearts—two—anterior one was undeveloped with transposition of the big vessels, connected to the undeveloped anterior lungs; posterior one well developed with normal big vessels.

(e) Dorsal aorta—Two.

(4) Abdomen—

(a) Diaphragm common.

(b) Coelomic cavity—one, with one liver and one spleen.

(c) Part of the mid-gut common, then there was a pyriform dilated part filled with meconium, which had two separate communications, each one going to the two different pelvises.

(d) Urinary bladder—two, well developed.

(e) Testicles—four, all well developed and in normal position.

#### Discussion

Incidence of conjoined twins is difficult to ascertain as it is a very infrequent anomaly and some cases are not reported because they deliver normally at home. The incidence reported by Mortimer and Kristbaum (1942) is 1:283,000 deliveries, Freidman *et al* (1962) 1:80,000 and Lu and Lee (1967) 1:25,367 deliveries.

Female monsters are 2 to 3 times more common than male.

The aetiology is failure of the germ disc to split into two units entirely, leaving portions of tissue in common to both embryos. This is a more probable explanation in the cases of twinning in which each of the pair is considerably less than a complete individual, the fore or the hind ends of the single body being duplicated (Willis, 1962).

Corner (1955) described how uniovular twins occur by separation of the early blastomere into two embryos, each with its own chorion. If separation occurs later by duplication of the inner cell mass of the blastocyst the embryos have their own amnion, but a single chorion. Should separation occur still later the germinal disc duplicates and two embryos develop in one amniotic sac with a common yolk sac and have a greater likelihood of being conjoined.

Different terminology has been used for different monsters depending upon the site of the union between the two foetuses.

Craniopagus	— Heads are united longitudinally.
Thoracopagus	— Joined by the chest.
Xiphopagus	— Joined by the lower sternum.
Omphalopagus	— Joined at the naval.
Ischiopagus	— Joined at the pelvic outlet.
Dicephalus	— There is separation of the cephalic ends of the foetuses.
Synccephalus	— There is separation of the caudal ends of the foetuses leaving fused or partly fused heads.

Diagnosis in the antenatal period can be done only by radiology or the

problem is recognised during an obstructed labour when examined under anaesthesia. Gupta and Wakhaloo (1968) reported a case where the diagnosis was made in the antenatal period by radiology.

Fortunately, most of these deliveries are premature and spontaneous delivery is common. Chaphekar and Chaphekar (1966), Varghese (1968), Shah *et al* (1969) and Chakraborty and Devi (1969) reported spontaneous vaginal delivery in conjoined twins. When diagnosed late in labour, the delivery can be completed per vaginam by dividing the union between the fetuses (Gupta and Wakhaloo, 1968). Caesarean section is the safest method of delivery in cases where the conjoined twins are at term and the patient is seen late in labour (Apte, 1964; and Rohatgi and Garg, 1969). In the present case an X-ray could not be taken as the patient was seen in labour and because it was premature the labour was easy.

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*See Figs. on Art Paper IX*