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LETTER TO EDITOR

Ischiopagus Tetrapus Conjoined Twins

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Sir,

A set of female ischiopagus tetrapus conjoined twins was born to a Gravida V Para IV 30 years old mother. The pregnancy & vaginal home delivery were uneventful. There was no history of infection, intake of any teratogens, drugs or exposure to radiation, etc in antenatal period. There was no family history of any congenital anomalies. Her antenatal period was uneventful & antenatal check up was irregular. She was also advised ultrasonographic examination, but could not be done.

Both of babies were united at anterior abdomen & pelvis. There were four lower extremities, of which one of each lower limb was united together up to heal (Table / Fig 1). There was a single umbilical cord and single common opening in perineum from which both were passing feces & urine (Table / Fig 2). The weight of both was 3.4 kg & both appeared normal. Investigations revealed no bony fusion of lower extremities. Ultrasonography & CT scans of abdomen & pelvis revealed four normal sized kidneys, septed urinary bladder & there was a single rectum. The livers were united partially with two gall bladders. Both twins died on 10th day after birth due to respiratory failure; before any surgical intervention could be undertaken.

Conjoined twining is one of the rare, most interesting & most challenging congenital malformations. Conjoined twins occur one in 50,000 - 100,000 births & only 6-11% of the conjoined twins are of the ischiopagus ^[1-3]. Tetrapus is a subtype of which all four lower extremities are present. About one half of ischiopagus have four legs, $1/3^{rd}$ has only three legs

Table/Fig 1



Clinical photograph of Conjoined Twins: Showing United anterior abdomen, Pelvis, lower extremities of one of each up to heal.



Clinical photograph of Conjoined Twins: Showing "Single perineal opening and single umbilical cord

& the remaining 1/5th are parasitic cases ^{[3].} Two thirds of conjoined twins are female & all pairs are of same sex. Sixty percent of conjoined twins are still born & only one third of conjoined twins are

possible for separation. The overall survival of separated ischiopagus tripus & tetrapus is 63%. A successful pregnancy and cesarean delivery 22 years after separation in an ischiopagus tetrapus conjoined twin has also been reported. ^{[3, 4].}

It is possible to diagnose conjoined fetuses by antenatal routine two-dimensional trans-vaginal ultrasound examination as early as 9th week of gestation. CT scans & MRI did not add much to ultrasonography for general evaluation of conjoined fetuses. Caesarean section seems to be the safest & preferable approach, although conventional vaginal delivery has been possible in many cases ^[2, 3, 5, 7].

Preoperative evaluation is the best directed at the individual organ system involved, although every organ system must be thoroughly investigated. Management of conjoined twins is always individualized. The knowledge of anatomy of both twins is a must before any surgical interventions. Wherever possible, separation is best preferred on an elective basis at the age of 9 to 12 months; as literatures showed high mortality rate if separation was done before 6 months of age. An emergency condition that may force separation even in the newborn includes; presence of stillborn twins, intestinal obstruction, ruptures of omphalocele, cardiac failure, obstructive uropathy, respiratory failure etc ^{[1 - 8].}

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