Vaginal delivery of conjoined twins: A case report

Nikhil Ranjan Rajkhowa
Swarnalata Devi[1]

Asst. Prof. Dept. of O & G, [1]PGT, Dept. of O & G,
Jorhat Medical College, Jorhat, Assam..

Correspondence: Dr Nikhil Ranjan Rajkhowa, Assistant Professor of Department of Obstetrics and Gynaecology, Jorhat Medical College, Jorhat, Assam. email: **pragybora@gmail.com**

ABSTRACT

Conjoined twin is a rare presentation among all multiple pregnancies. Undiagnosed conjoined twin in the antenatal period may create a great problem for the mother as well as the baby during delivery. In the present case study, we are reporting one case of thoraco-omphalopagus which was referred to our hospital as a case of primigravida at term pregnancy with intrauterine foetal death with shoulder dystocia. Ultrasonography (USG) done in the mid trimester period, reported it as a case of single, live foetus at 26th weeks of gestations without any congenital anomaly. The diagnosis of conjoined twin was confirmed only after delivery by evisceration under anaesthesia. Although a good amount of manipulation was required to conduct the delivery, but no maternal complication was observed.

Keywords: Conjoined twins, shoulder dystocia, thoraco-omphalopagus.
Conflict of interest: None. **Disclaimer:** Nil.

Simultaneous development of two fetuses in the uterus is called twin gestation. When two foetuses are joined to each other anywhere in the body the condition is called Conjoined twins or Siamese twins. The incidence ranges from 1 in 50 000 to 1 in 100 000 live births [1]. Its etiology is unknown, but an incomplete division of the zygote between 13th to 15th day after fertilization probably occurs [2]. This type of twins is always monochorionic- monoamniotic [1]. This is a rare type of twins with incidence less than 1% among twins. The condition is more frequently found among females, with a ratio of 3 : 1 [3]. Two theories have been proposed to explain this observation: the process of X-inactivation overlaps with the timing of monozygotic twinning and thus may directly contribute to the development of monozygotic twins, and the XX karyotype may confer a survival benefit [4].

In general, survival of this type of twins depends upon their internal development. About 40% to 60% of the conjoined twins are born alive, and almost 35% of these live-born neonates die within 24 hours [5]. According to the most prominent site of connection, the classification is usually made: the thorax (thoracopagus; 30-40%), abdomen (omphalopagus; 25-30%), sacrum (pygopagus; 10-20%), pelvis (ischiopagus; 6-20%), skull (craniopagus; 2-16%), face (cephalopagus), or back (rachipagus) [5, 6].

Case History

Mrs. B B, 25 years, a primigravida attended labour room of Jorhat Medical College and Hospital (JMCH) on 22nd of February, 2014 at 3 AM. She was referred from nearby District Civil Hospital as a case of obstructed labour due to

Received: 4 December 2014. **Accepted:** 12 December 2014.
Rajkhowa NR, Devi S. Vaginal delivery of conjoined twins: A case report. Journal of Obstetrics & Gynaecology Barpeta, 1(2):114-6

shoulder dystocia. Her expected date of delivery (EDD) was on 28th February, 2014. On examination, her pulse was 94/min, BP 130/80 mm of Hg, mild pallor and dehydration was present. Uterus was of term size and foetal heart sound was absent. On inspection, foetal head was seen outside the vaginal introitus. Her haemoglobin (Hb%) was 9.3 gm/dl, blood group was A +ve. She had a report of previous ultrasonography (USG) in which it was a single foetus at 26th weeks of gestations without any mention about the presence of any congenital anomaly.

Initially thinking the case as shoulder dystocia, Mc Roberts manoeuvre was tried unsuccessfully to deliver the baby. With repeated trial, the shoulders of the foetus delivered one by one but still failed to deliver beyond shoulders. So, it was not a case of shoulder distocia. There was some sort of obstruction at the lower part of the chest or at the level of abdomen and for which delivery of the rest of the foetal parts were unable. So, the patient was shifted to operation theatre (OT) and decision was taken to do evisceration under anaesthesia. The anaesthetist gave halothane for uterine relaxation. During examination under anaesthesia, hard mass at the lower part of anterior chest of the foetus was felt. After a good amount of manipulation, the delivery of the foetus was succeed finally. Only after delivery, the case was confirmed as a conjoined twin. The second baby was smaller than the first one and both were joined at abdomen & lower part of the chest. Of course it was a dead foetus and delivery of the foetus had been done without injuring the mother.

Discussion

Early diagnosis of a complicated case is the most important factor for the management of a pregnancy. A conjoined twins can now be diagnosed at 8th weeks of gestational age with transvaginal ultrasound [7]. But in this case, she had a report of previous ultrasonography (USG) in which it was single foetus at 26th weeks of gestation without mentioning about the presence of any congenital anomaly.

There are many reports of vaginal deliveries of conjoined twins (Agarwal et al. 2003) [8]. Although compressible foetal tissue may facilitate vaginal birth but dystocia, uterine rupture or other maternal soft tissue injuries can occur. She was also referred as a case of obstructed labour due to shoulder dystocia. So, diagnosis of conjoined twins in labour is sometime difficult and it can be wrongly diagnosed as a case of shoulder dystocia like this case.

Generally to avoid maternal trauma and to facilitate treatment of viable neonates, caesarean section is the preferred mode of delivery of the conjoined foetus. However, vaginal delivery may be attempted in case of nonviable foetus. Manoeuvres to facilitate vaginal delivery have been described (Grover et al. 1990) [9], but evisceration, craniotomy, decapitation or amputation may be needed as last resort. Mrs BB was a case of primigravida at term pregnancy with intrauterine foetal death (IUFD) in second stage of labour without antenatal diagnosis of conjoined twins. That is why, evisceration was done. After delivery, birth canal was properly examined and no maternal soft tissue injury was seen.

Conclusion

This type of situation can be prevented by antenatal diagnosis of such cases. An anomaly scan at 16-19 weeks of gestation is of immense help. If not diagnosed at this stage, at least such gross anomaly should be diagnosed by good quality USG before planning for delivery. One should not forget to think about congenital anomalies of a foetus (including conjoined twins) presenting as a case of shoulder dystocia for which initial shoulder dystocia drill fails.

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Iimages of the babies after evisceration.