

Dicephalic Parapagus Twins: A Rare Case Report

Amina Kuraishy¹, Nasreen Noor², Ilma Kuraishy³

¹Senior Resident in Department of Obstetrics and Gynaecology, Jawaharlal Nehru Medical College, AMU Aligarh

²Assistant Professor in Department of Obstetrics and Gynaecology, Jawaharlal Nehru Medical College AMU Aligarh

³Obstetrics and Gynaecology Specialist, City Hospital, Gonda, Lucknow
Corresponding Author – Amina Kuraishy

aminakur234@gmail.com

Abstract

Conjoined twins accounts for 1% of monochorionic twins. Dicephalus Parapagus is a rare type of conjoined twins where two heads develop over a shared pelvis. Such cases are usually diagnosed on antenatal ultrasound. Here, we are reporting a difficult delivery of Dicephalic Parapagus which presented in emergency as obstructed labour. This case reinforces the importance of antenatal anomaly scan and institutional delivery.

Keywords

Conjoined twins, Dicephalus Parapagus, monochorionic twins and obstructed labour.

I. Introduction

Conjoined twin is a rare but challenging condition for not only for obstetricians but also for the patient and her family. This rare anomaly occurs in 1 in 50000 to 100000 pregnancies [1, 2]. It arises from incomplete division of embryo or due to secondary union of embryonic disk. They can be classified according to the site of connection: 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) [3,4]. Dicephalic Parapagus is an uncommon condition and its incidence is 0.5 % among the all conjoined twins [5]. It arises from two separate nearly parallel notocords on one embryonic disc, very close caudally but varying degrees of separation caudally [1,5].

Prenatal diagnosis with ultrasound and planning of the delivery is the most important issue for successful management of conjoined twins otherwise it can lead to significant maternal morbidity. Here we present our experience of a woman with dicephalic parapagus twins who reported in emergency room with obstructed labour.

II. Material and Methods

Study setting

A 30 year old G4P3L3 presented to emergency room with obstructed labour such that fetal hand and head were seen out of the vaginal introitus. History revealed that she

was an unbooked antenatal woman with a term pregnancy. She previously had three full term normal deliveries at home. Her previous medical and surgical history was unremarkable. There was no family history of twinning on either maternal or paternal sides, and there was no history of any medication or X ray exposure. For last two days she had pain in the lower abdomen which was associated with watery discharge per vaginam. She was attended at home by a midwife for the delivery. During course of labour, baby's head was delivered out along with the arm but the midwife was unable to advance the delivery further so she referred the woman to our hospital.

On examination patient looked dehydrated and exhausted. Her vitals were Pulse rate was 120 beats/min, Blood pressure - 112/64, Temperature - 99 F. on Abdominal examination - Fundal height was 36 weeks, tone was increased, lower segment was stretched out, foetal parts were not palpable and foetal heart rate was absent. On local examination the vagina was dry and hot, and cyanotic foetal head along with hand were found out of the vagina which was jam-packed. and pelvis seemed to be inadequate as seen in Figure 1. She was urgently taken up for caesarean section. Foetal body along with head was taken out but the congested head and hand which were lying out the introitus could not be delivered as the head was grossly oedematous. Foetal body along with one head was found lying within the the uterine cavity where as the other head (congested), was lying

outside the introitus along with one hand. This other head was found grossly oedematous and therefore could not be delivered vaginally. So craniotomy was done and the fetal head was repositioned and delivered out through uterine incision. Placenta was monochorionic of 548 grams. Umbilical cord was normal having two arteries and one vein. Baby weight was 4206 grams, and Apgar score was 0 (Figure 2). There were two extensions of uterine incision which were meticulously repaired. Mild atonic PPH occurred which was controlled by uterotonics. One unit blood was transfused. Her hospital stay was uneventful and was discharged after stitch removal. Patient's attendant refused for foetal autopsy.

III. Discussion

Conjoined twins are rare type of monochorionic monoamniotic twins where twinning is initiated after the embryonic disk and the rudimentary amniotic sac have been formed and fission of the embryonic disc is incomplete [6]. It occurs in 1% of all monochorionic twins [4,7]. It has always been fascinated by medical professionals. Foetal outcome is usually poor. About 40-60% of them are stillborn, and 35% of live births do not survive beyond the first 24 hours [4]. The prognosis of their survival depends on extent of twinning and presence of anomalies.

Early diagnosis of conjoined twins is very important so as to avoid maternal complications which can be done with antenatal ultrasound. They can be diagnosed as early as 8th weeks of gestational age with trans-vaginal ultrasound [5]. Our case was

referred for obstructed labour with shoulder dystocia without any preceding antenatal ultrasound. Moreover the diagnosis of conjoined twins in labour is sometimes difficult and it can be wrongly diagnosed as a case of shoulder dystocia like this case. Generally to avoid maternal complications such as obstructed labour, genital tract trauma and uterine rupture, caesarean section is the preferred mode of delivery. It can also facilitate the treatment if the neonates are viable [8]. In some rare instances successful vaginal delivery of conjoined twins have been reported [9, 10, 11]. Patient presenting in prolonged second stage of labour even caesarean section is difficult due to congestion. Like in our case destructive procedure - craniotomy was done to take the baby out.

IV. CONCLUSION

Early diagnosis of conjoined twins with sonography and institutional delivery is the key for successful management of conjoined twins otherwise it can lead to significant maternal and foetal morbidity.

ACKNOWLEDGMENT

Thanks to the department of obstetrics and gynaecology for their cooperation and support.

V. References

- [1] Spencer R. Theoretical and analytical embryology of conjoined twins: part I: embryogenesis. *Clin Anat* 2000; 13:36-53.
- [2] Hanson JW. Incidence of conjoined twinning. *Lancet* 1975; 2:1257.
- [3] Harper RG, Kenigsberg K, Sia CG, Horn D, Stern D, Bongiovi V. Xiphopagus conjoined twins: a 300-year review of the obstetric, morphopathologic, neonatal, and surgical parameters. *Am J Obstet Gynecol* 1980;137:617-29.
- [4] Edmonds LD, Layde PM. Conjoined twins in the United States, 1970-1977. *Teratology* 1982;25:301-8.
- [5] O'Neill JA, Holcomb GW III, Schnauffer L, Templeton JM Jr, Bishop HC, Ross AJ III, Duckett JW, Norwood WI, Ziegler MM, Koop CE. Surgical experience with thirteen conjoined twins. *Ann Surg.* 1988;208:299-312.
- [6] George D, Athanasios P, Ioannis T, George M, Ioannis K, Aris A. First trimester diagnosis of dicephalus conjoined twins. *Eur J Obstet Gynecol Reprod Biol* 2004;112:110-3.
- [7] Spitz L. Conjoined twins. *Prenat Diagn* 2005;25:814-9.
- [8] Grover V, Chawla R, Mishra SL. Management of conjoined twins. *Int.J. Gynaecol Obstet.* 1990; 31: 67 ages of the babies after evisceration.67-68.
- [9] Agarwal U, Dahiya P, Khosla A. Vaginal birth of conjoined thoracopagus-a rare event. *Arch. Gynaecol Obstet.* 2003; 269: 66-77
- [10] Rajkhowa NR, Devi S. Vaginal delivery of conjoined twins: A case report *Journal of Obstetrics &Gynaecology Barpeta*, 1(2):114-6
- [11] Harman M. Vaginal delivery of dicephalic parapagus conjoined twins: Case report and literature review. *Tohoku J Exp Med* 2005; 205: 179-85.

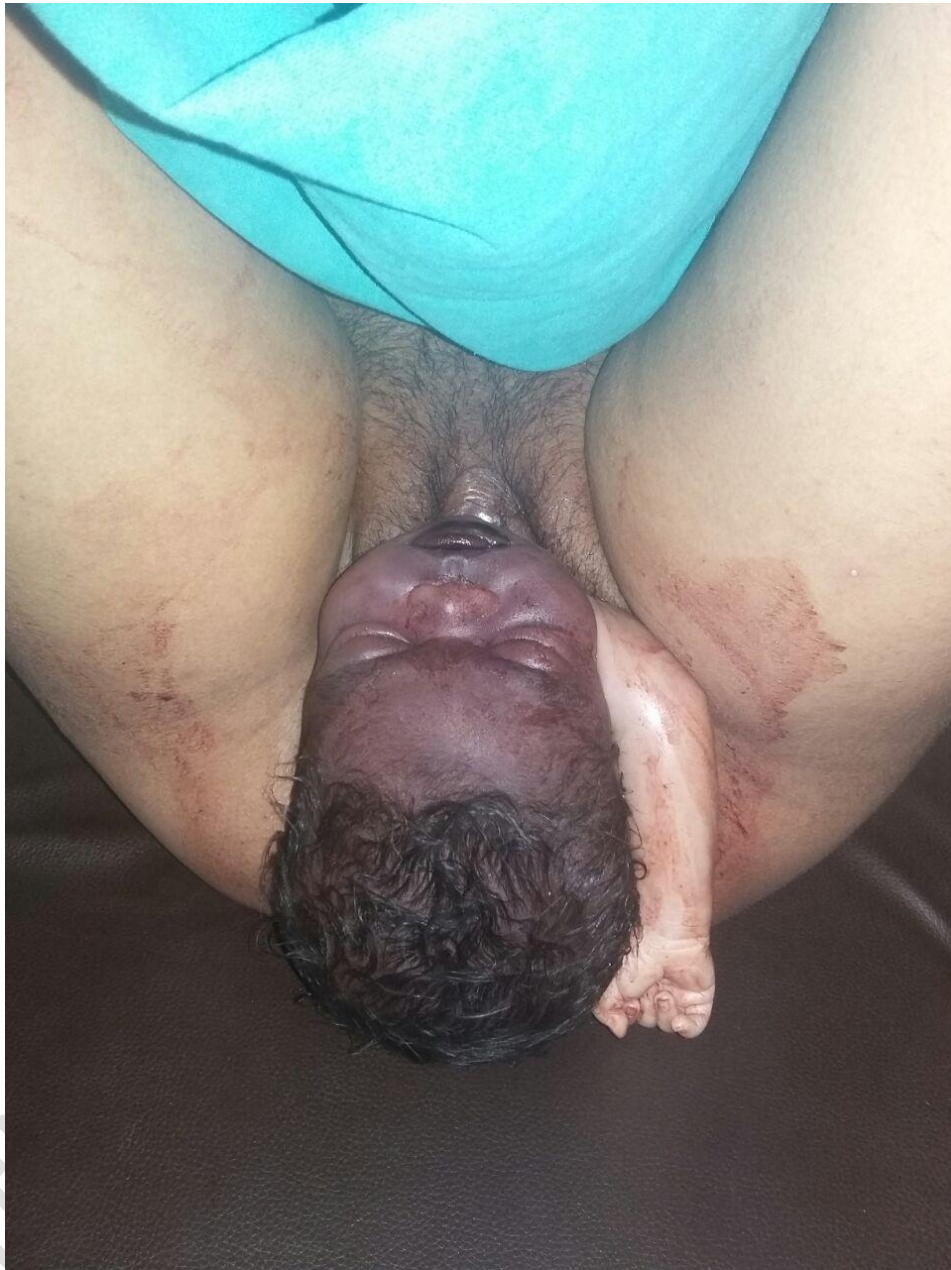


Figure 1



Figure 2



Figure 3