



A RARE CASE OF CONJOINT TWINS PRESENTING AS DICEPHALUS PARAPAGUS: A CASE REPORT

Obstetrics & Gynaecology

Dr Jaya Singh* Postgraduate Resident. *Corresponding Author

Dr Minakshi Singh Assistant Professor.

Dr Chitra Joshi Professor.

ABSTRACT

Background: In the modern era of obstetrics conjoint twins are rarely encountered 1 in 50000 or 1 in 100000 births[1]. Of these less than 0.5% of the cases are dicephalus parapagus twins which is therefore a very rare occurrence. Conjoined twins can be detected as early as 12 weeks of gestation on ultrasonography. Conjoined twinning should be kept in mind when monozygotic twins are encountered. Many conjoined twins have abnormalities incompatible with life, so early prenatal diagnosis is very important for optimal management of both pregnancy and delivery.

KEYWORDS

Conjoint twins, dicephalus parapagus, monoamniotic monochorionic

INTRODUCTION

Conjoined twins is a rare embryological developmental disorder which occurs in one in 50000 or one in 100000 births [1]. As Conjoined twinning is a random event it is rarely related to heredity, maternal age or parity [2]. Two well-known theories of development of conjoined twins namely fission theory (incomplete fission of a single embryonic disc 13 to 15 days after the ovum is fertilized) and fusion theory (secondary fusion of two separate monovular embryonic discs). Fusion theory is no longer believed to be the basis of conjoined twinning [3,4]. Conjoined twins are mainly classified according to the incomplete or complete duplication of the notochord. There are eight types of conjoint twins according to the prominent sight of union. Most common types of conjoint twinning are thoracopagus or omphalopagus and is found in 42%-75% of the cases.

CASE REPORT

A 31 years old Gravida 3 Para 0 Live 0 Abortion 2 with marital life of 5 years presented to our hospital Antenatal OPD with spotting per vaginum since 1 day at 21 weeks 4 days of pregnancy. Patient had history of 2 spontaneous abortions 3 years and 1 year back. Both abortions were spontaneous and were not followed by any surgical method of evacuation. Marital life was 5 years. In this pregnancy, patient had first antenatal visit late in second trimester. There no folic acid intake in first trimester. No level 2 scan was done. First and second trimester screening was not done.



Fig. 1: Dicephalus Parapagus

On general examination her Pulse rate was 82/min, BP was 100/60mmHg. No significant previous medical and surgical history was there. On obstetric examination - Abdomen was 22 - 24 weeks size relaxed. On Per vaginal examination external os was closed, slight bleeding per vaginum present. Her obstetric scan of 21 weeks suggested two foetal heads with dithorax, single abdomen ,

tetrabrachius , single symphysis pubis s/o dicephalus foetus. Two spines were seen. There was no history of any congenital abnormality in the family and no history of maternal illnesses like diabetes mellitus, hypertension, cardiovascular diseases or any other systemic illness. No history of any drug intake . Moreover, maternal age was <35 years. In view of the impending complications in fetus and potential adverse outcomes in both mother and fetus, all risks and prognosis were explained to the patient and attendants. Decision of termination of pregnancy taken by patient and termination of pregnancy planned after written informed consent. Tab mifepristone 200 mg Per oral single dose was given. Tab misoprostol 200 microgram 2 doses given buccally. Patient aborted fetus en sac after 48 hrs of tab mifepristone. Post delivery specimen was not sent for autopsy as patient's attendant were not willing for that. Patient was discharged on Post Natal -day 3 under satisfactory condition with follow up advise and treatment.



Fig. 2 And Fig. 3: Twin Front And Back Image



Fig. 4 Radiological Image

DISCUSSION

Conjoined twins have always been a cause of enigma among researchers and has attracted their interest since long. A study done by Mutchinick et al shows that the incidence of conjoined twinning was 1.47 per 100,000 births. Due to marked variation in the surveillance

programs it has shown that highest prevalence was found to be in Finland with 3.22 per 100,000 births and it has been as low as 0.08 per 100,000 births in Italy. Incidence in developing countries like India cannot be documented due to limited studies and data records [1]. Also there is dearth of studies that establish a causative factor or risk factors of conjoined twinning, hence the urgent need for timely and appropriate prenatal diagnosis to screen and detect any anomaly early in pregnancy. Ultrasound is used as a screening tool for prenatal diagnosis of this condition. Investigations of choice for confirming diagnosis are Amniography and Fetoscopy. In recent times, Fetography has replaced Amniography because it can demonstrate finer details due to oil contrast medium used in it. MRI can also be used. As per the literature roughly 40% of conjoined twins are still born and 35% die in the first 24 hours of life. Moreover, only 60% of surgically treated conjoined twins survive. Still birth and mortality rate are extremely high in dicephalus twins. In those Dicephalic twin who are born the duration of survival in cases reported is very short varying from 15 min to 11 days [5]. Screening should be done in all for early detection of the anomalies and it is always advisable to terminate the pregnancy as early as possible instead of attempting separation which not only involves cost and time but also is a painful and wasteful exercise for both clinician and the parents.

Our case patient presented with chief complaint of lower abdominal pain and slight bleeding per vaginum. Her 21 week scan shows dicephalus parapagus variety of conjoint twins, all risks and prognosis associated was explained to patient and attendants following which they decided to terminate this pregnancy. After informed consent termination of pregnancy was planned, tab mifepristone and tab misoprostol was given followed by which patient aborted. As patient and attendants did not give consent, autopsy couldn't be performed. Patient was discharged on Post Natal day 3 under satisfactory condition with advice to follow up.

CONCLUSION

Congenital twinning occurs in one in 100,000 births out of which Parapagus with dicephalus variety is extremely rare embryological developmental disorder (0.5% amongst reported cases). We present a case of conjoined twinning, which is characterized by the presence of two heads, two vertebral column and single symphysis pubis, with single genitor-urinary tract and single gastro intestinal tract. The present condition, referred to as dicephalus parapagus, has seldom positive outcomes. Spontaneous abortion rate is very high (roughly 60 %). And those who are born, survival mainly depends upon the shared anatomy of internal structures. Surgical separation of the conjoined twins in most of the cases is not successful, also this later results in increased morbidity and mortality. Therefore it is crucial to screen for the presence of such congenital anomalies early during pregnancy, so that we can provide parental counselling and can timely terminate and choice of medical termination of pregnancy can be offered to the parents. A clinician must have high index of suspicion from early antenatal period to rule out possibility of conjoined twins when one is dealing with monochorionic, monoamniotic twin pregnancy.

Declarations

Funding: No funding sources

Conflict Of Interest: None declared

Ethical Approval: Not required

REFERENCES

1. Mutchinik OM, Luna-Munoz L, Amar E, Bakker MK, Clementi M, Cocchi G, et al. Conjoined twins: a worldwide collaborative epidemiological study of the international clearinghouse for birth defects surveillance and research. *Am J Med Genet C Semin Med Genet.* 2011;4:274-87.
2. Barth RA, Filly RA, Goldberg JD, Moore P, Silverman NH. Conjoined twins: prenatal diagnosis and assessment of associated malformations. *Radiol.* 1990;177(1):201-7
3. Kaufman MH. The embryology of conjoined twins. *Child's Nerv Sys.* 2004;20(8-9):508-25.
4. Karaer A, Tanrıkulu İ, Güneş N, Çakır E, Öztaş A. Parapagus dicephalus dibrachus dipus: a case of conjoined twins. *J Turkish German Gynecol Associat.* 2009;10(4):241
5. Owiti W, Kitunguu P, Kiilu C, Langat R, Odhiambo G. Autopsy Findings on a Pair of Dicephalic Parapagus Twins: A Case Report. *Annal Afri Surg.* 2014;11(1).