4767: Counselling parents with prenatally detected Diastematomyelia - an outcome study of 33 cases from a single tertiary care centre

Jagruthi C, Acharya V, Radhakrishnan P, Bangalore Fetal Medicine Centre, India

BANGALORE FETAL MEDICINE CENTRE

Introduction: Diastematomyelia is a rare form of spinal dysraphism characterised by sagittal cleft in the spinal cord with splaying of posterior vertebral elements by an osseous or cartilagenous spur[1]. The most striking ultrasonographic findings of diastematomyelia are a widening of the spinal canal in the coronal plane and an echogenic spur traversing the spinal canal in the axial plane[2].

Objectives:
To study the antenatal associations and postnatal outcomes of fetal Diatematomyelia

Methodology:

- Retrospective comparative study of prospectively collected data from a single tertiary fetal care referral centre during Jan 2012 to Dec 2022
- All fetuses diagnosed with diastematomyelia were included in the study
- All scans were performed by FMF certified operators and were documented on Astraia fetal database software
- Outcomes were obtained by telephonic interview and examination of delivery details in hospital records

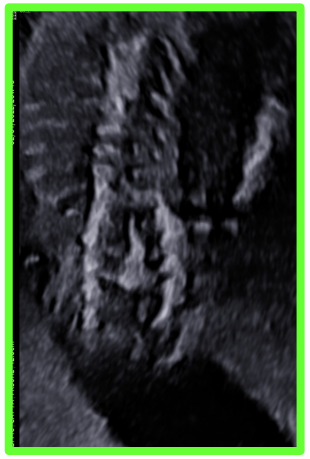

Fig 1: Gray scale image;

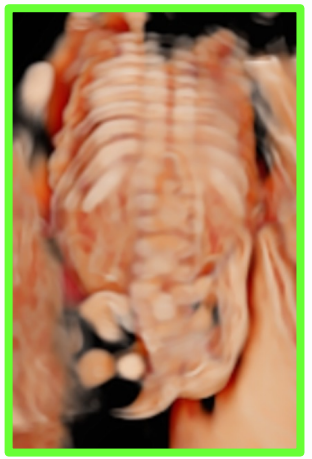

Fig 2: 3D rendered image

Results: Mean gestational age of diagnosis - 19 weeks (13-24 weeks)

Outcome = 33	Isolated = 23 (69.6%)	Associated anomalies = 10 (35.7%)
Live birth	13/ 20 (65%)	3 (30%)
Termination	6 (30%)	6 (60%)
Miscarriage	1(5%)	1 (10%)
Lost for follow up	5	0

Live birth- 16/25(64%)	Conservative management	Surgical management
Isolated- 13/20(65%)	10	3
Associated- 3/10(30%)	1	2

All except 1 (associated) did well after surgery with no deficits

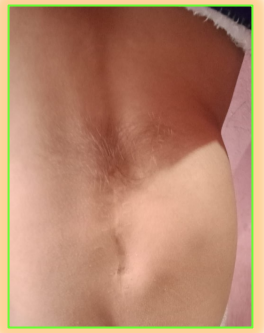

Fig 3: Postnatal image of surgically managed isolated Diastematomyelia

Conclusions:

- Association with other spinal and non spinal anomalies - hence detailed anomaly scan is warranted.
- In the absence of associated anomalies, the postnatal outcome is good and hence parents can be counseled that even after surgery majority of the babies are likely to do well with no or little residual deficit.
- This study will help specialists to counsel parents in 'low or limited resource" situations

Reference: 1.Allen LM, Silverman RK. Prenatal ultrasound evaluation of fetal diastematomyelia: two cases of type I split cord malformation. Ultrasound in Obstetrics and Gynecology. 2000 Jan;15(1):78-82.

2.Has, Recep, et al. "Prenatal diagnosis of diastematomyelia: presentation of eight cases and review of the literature." Ultrasound in Obstetrics and Gynecology:The Official Journal of the International Society of Ultrasound in Obstetrics and Gynecology 30.6 (2007): 845-849

Correspondence: drprathima@bangalorefetalmedicine.com