Anaesthetic Management of a Parturient with Congenital Sacral Agenesis:
Case Report

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Introduction: Sacral agenesis/Caudal regression syndrome is a relatively rare congenital disorder in which there is a developmental anomaly of the lower spine affecting 1 in 25,000 live births. It can comprise of heterogenous anomalies of the caudal spine and spinal cord along with involvement of urogenital system, hindgut and lower limbs (1). We present a case of a parturient with Sacral agenesis managed by a multidisciplinary team in our hospital.

Case Report: A 26 year old pregnant primigravida with known congenital Sacral agenesis presented at 13 weeks gestation at our antenatal clinic with a booking BP of 124/80 mmHg. She was known to be allergic to latex and had multiple laparatomies as a child including an ileocystopasty, ACE procedure for bowel management through an umbilical stoma and a neuropathic bladder requiring intermittent self catheterisation. A multidisciplinary team discussion resulted in a delivery plan for a vaginal birth provided her anal sphincter would not be compromised. She was reviewed with her radiological imaging in the anaesthetic high risk clinic, it was decided that epidural analgesia could be performed but not subarachnoid injection. An indwelling long term urinary catheter and antibiotics were prescribed antenatally. She presented in labour at 37+4 weeks gestation to the delivery suite. Cardiotocogram was satisfactory and she was allowed to progress in her labour. Despite ultrasound confirmation of the epidural space the epidural insertion was sited with difficulty but worked well. Intrapartum she was augmented with oxytocin for incoordinate contractions. She was taken to theatre for fetal distress in the second stage and a live male infant was successfully delivered with low cavity forceps under epidural top up. She was recovered in a high dependency care area without any problems.

Discussion: There are few reported cases of pregnant parturients with Sacral agenesis. The spectrum of organs involved means the anaesthetic management can be variable. Parturients usually have a complicated pregnancy and labour with reported spino-pelvic instability and compromised pelvic sphincter mechanism (which is required for natural labor). Caesarean section can be quite intimidating owing to dense scarring associated with frequent bowel surgeries and bladder surgeries. Radiographic imaging have reported few cases of tethering of cord (2). This supports our preference for offering a regional anaesthesia limited to an epidural pain relief. An epidural also posed a risk of patchy block owing to spinal deformity.

Conclusion: The successful outcome for the mother and baby shows that vaginal birth is possible in carefully selected patients with challenging congenital anomalies provided individualised care is planned antenatally by a multidisciplinary team.

Reference: