

Fetal neck mass ;Prenatal and postnatal management(EXIT procedure) ; A case report

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Objective

Prenatal comprehensive evaluation of fetal neck mass helps in appropriate counselling, optimal antenatal, and postnatal management. Some fetal neck masses need prenatal diagnostic and therapeutic interventions and immediate postnatal interventions like EXIT(Ex-Utero intrapartum treatment). Herewith we present a case report of a fetal neck mass and its management.

Methods

A 30 year old G7A6 mother was referred to our unit at 29 weeks of gestation for a fetal neck mass evaluation. The mass was first detected at 22 weeks gestation, on the anterior aspect of the neck measuring 2 cms. At 29 weeks there was a mass with solid and cystic areas with minimal vascularity measuring 6.5cms x 6 cms on the anterolateral aspect of the neck leading to the neck extension. Fetal growth and dopplers were normal. Our differential diagnoses were Fetal cervical teratoma and Lymphangioma Serial scans showed a progressive increase in the size of neck swelling, over the next few weeks and the mother developed severe polyhydramnios. Serial amnioreductions were done.

Results

After detailed counselling of parents and with a multidisciplinary team approach elective Caesarean section was performed at 37 weeks. Predelivery ultrasound-guided intrauterine decompression of the cystic component was done to relieve pressures on airways before delivery to improve the chances for airway access. Ex-Utero intrapartum treatment (EXIT) procedure was performed before the separation of the placenta. Multidisciplinary management led to uterine relaxation well maintained by NTG and warm saline fomentation, Tracheostomy and securing airway using Video laryngoscopy. The total time of EXIT procedure is 11 minutes Surgical excision of the mass was done on day 3 with an overall good outcome. The mass turned out to be Immature Teratoma on histopathology.

Conclusion

Multidisciplinary team approach and prenatal planning results in good perinatal outcomes in dealing with fetal neck masses. Predelivery cyst reduction helped reducing the time of procedure Good uterine relaxation techniques during EXIT to maintain the placental perfusion and timely tracheostomy helped to reduce maternal, fetal complications resulting in safe delivery of the baby.