MedCrave
Step into the World of Research

MOJ Women's Health

Case Report

Open Access

CrossMark

FETUS DIAGNOSED WITH CERVICAL TERATOMA DELIVERED BY EXIT PROCEDURE (EXTRA UTERINE INTRAPARTUM TREATMENT)

Abstract

Congenital cervical teratomas are rare tumours of germ cells that should be diagnosed antenatally by ultrasound during anomaly scan or even earlier. The incidence of teratomas of the head and neck is 3-5%. We are presenting a case of rare cervical teratoma.[1] Congenital cervical tumours are often clinically dramatic, though basically benign. Prognosis is favourable only if the airway is quickly stabilized and necessarily surgical procedure is planned and executed effectively.[2]

Case presentation: A 34-year-old female presented at 32 weeks of gestation, at Al Amal National Hospital where an ultrasound examination revealed a single viable cephalic fetus with a huge irregular heterogeneous anterior neck mass suspected as congenital cervical neck teratoma. The delivery was planned at 37 weeks gestation. The team was assembled for EXIT procedure which includes the obstetricians, neonatologist, anthologist, ENT surgeons. At 37 weeks of gestation, the child was maintained on maternal circulation after caesarean section until successfully intubated (Extra Uterine Intrapartum Treatment (**EXIT**) was performed at Al Amal National Hospital after liaison with the anesthetist, neonatologist and the pediatric surgeon. A female fetus weighing 3.8 kg was delivered and intubated immediately. Unfortunately, the newborn died at 48hours of age.

Conclusion: Prenatally diagnosed head and neck teratomas can result in early neonatal death if the delivery was not planned correctly with right multidisciplinary team. In this case EXIT is the procedure of choice.

Keywords: congenital neck teratoma, cystic teratoma, benign teratoma, head and neck neoplasms, cervical teratoma

Volume 10 Issue 4 - 2021

Sally Damra Elnour Mohammed,[1] Rami Salaheldien,[2] Badreldeen Ahmed[3]

[1]Obstetric and Gynae consultant, Assistant professor -Al Neelain University, Sudan

[2]Gezira University, Anaesthetist at Alamal National Hospital, Sudan

[3]FRCOG MD (Newcastle Upon Tyne) Professor of Obstetrics Weill Cornell Medicine-Qatar, Professor of Obstetrics Qatar University, Professor of obstetrics and Gynaecology - University Sarajevo School of Science and Technology, Director of Feto Maternal Centre Doha Qatar

Correspondence: Sally Damra Elnour Mohammed, Obstetric and Gynae consultant, Assistant professor -Al Neelain University, Khartoum, Sudan, Tel 002499126903 90, Email d.sally222@gmail.com

Received: October 11, 2021 | **Published:** November 26, 2021

Introduction

Congenital cervical teratomas are the most common congenital tumours. They are rare tumours of germ cells that may be diagnosed via ultrasound scanning. Teratomas are usually benign and a malignant transformation is rare.[1] The incidence of teratomas of the head and neck is 3-5 %, you look after cases with principally anterior and lateral placement some sources cite a female predominance.[2] Most teratomas occur as an isolated lesion, but sometimes are part of a syndrome such as Klinefelter syndrome, Trisomy 13, Trisomy 21, or Beckwith-Wiedemann syndrome. Cervical teratomas comprise 2-9% of all teratomas. Congenital cervical tumors are often clinically dramatic, though basically benign.[3] Neck teratomas can cause major airway obstruction due to the external compression that oropharyngeal or neck masses produce. In addition, there is often an intrinsic lesion within the larynx or trachea.[4] Prognosis is nice only if the airway is quickly stabilized and surgery isn't delayed

Case report

A 34-year-old female presented at 32 weeks of gestation, at Al Amal National Hospital where an ultrasound examination revealed a single viable cephalic fetus with a huge irregular heterogeneous anterior neck mass measuring 9.2*6.9cm. No other abnormality was detected. The parents were non-consanguineous and medically free. Parents were counseled regarding the outcome of possible morbidity, mortality, and mode delivery. At 37 weeks of gestation, EXIT (Extra Uterine Intrapartum Treatment) was performed at Al Amal National Hospital after liaison with the anesthetist, neonatologist, and pediatric surgeon. A female fetus weighing 3.8kg was delivered and intubated immediately. The size of the mass post-delivery measured 12*11*5cm. The baby was admitted to NICU. An MRI and blood investigations were done. Unfortunately, the newborn developed respiratory distress syndrome at 48hr. of age and died.

Discussion

Congenital cervical teratomas are related to a high rate of perinatal mortality because of airway obstruction. Prenatally diagnosed teratomas of the head and neck are best managed by a multidisciplinary team, which can include: Paediatric Surgeon, Anaesthetist, Obstetrician, Neonatologist, Radiologist, Geneticist, and a Paediatric Otolaryngologist.[5] There are many differential diagnoses for fetal neck masses include lymphangiomas or, cystic hygromas, cervical teratomas, haemangiomas, brachial cysts, cervical neuroblastomas, soft tissue sarcomas, and congenital cervical thyroid goiters. The tumor site is one among differentiating features of fetal neck masses, as teratomas are usually located anteriorly and along the midline, whereas lymphangiomas or cystic hygromas, haemangiomas, and brachial cleft cysts are more posterior and lateral in location.[4] If fetal imaging determines that there's a high probability of severe or complete higher airway obstruction, then AN EXIT procedure ought to be thought about.

Airway compromise is that the most serious postpartum complication of giant cervical tumor, and antenatal diagnosis is crucial for early recognition. The EXIT procedure permits for partial fetal delivery with continued maintenance of uteroplacental circulation and

gas exchange whereas measures are taken to secure the fetal airway before completion of the delivery (Figures 1–6).

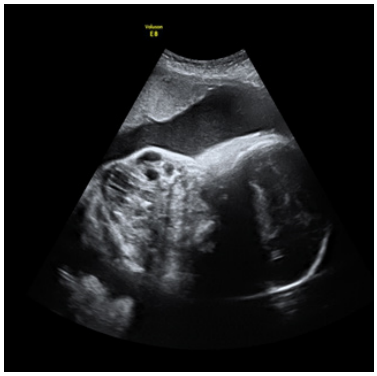

Figure 1 Antenatal image showed huge cervical tumour.

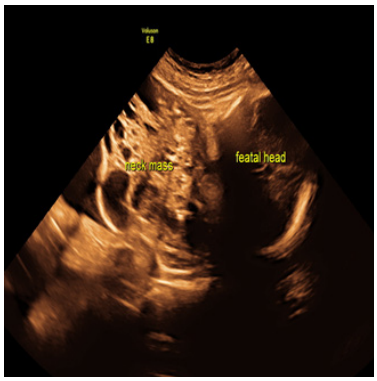

Figure 2 Antenatal image revealed complex neck tumour.

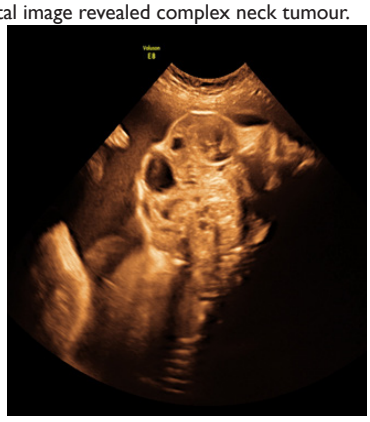

Figure 3 Antenatal image revealed complex neck tumor.

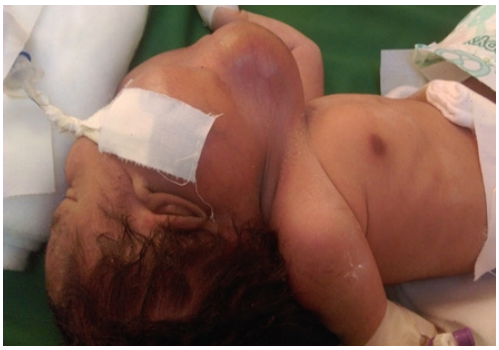

Figure 4 Post-natal image showed huge neck teratoma.

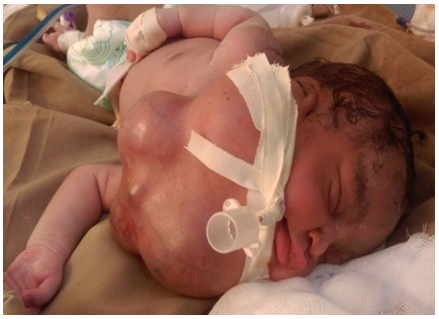

Figure 5 Postnatal image showed intubated baby.

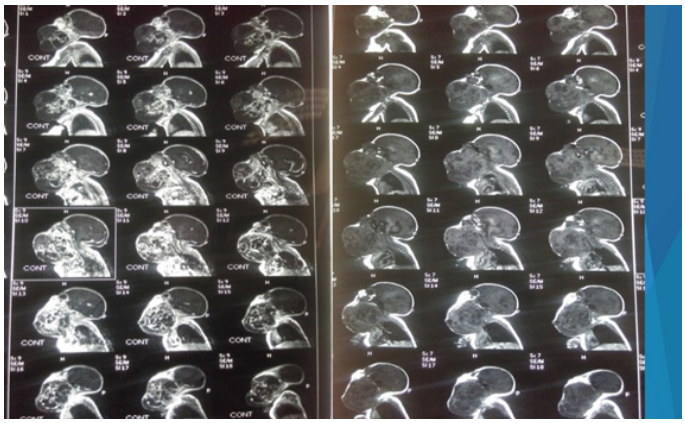

Figure 6 CT showed huge neck tumor suspected teratoma.

Conclusion

When fetal cervical teratoma is diagnosed antenatally. The likelihood of severe or complete upper airway obstruction is very high. EXIT is the procedure of choice. Fetal MRI may complete the picture and help with planning of the procedure. Surgical resection is the primary treatment for head and neck teratoma. Recurrence is rare and the long-term prognosis is excellent.

Acknowledgments

None.

Author contribution

1) S.D: diagnosed the case, she is the primary doctor caring for the patient and delivered the patient with the team.
2) prof Bader Ahmed; aided in the final diagnosis and plan the EXIT.
3) Rami: anesthetist who intubated the baby with his team.

Conflicts of interest

The author states there are no conflicts of interest.

Consent for publication: parents were fully informed and consented for publication of information as well as photos of their deceased newborn and they agreed as long as it will be used for educational purposes and knowledge dissemination.

Funding

None.

References

1. Toprak, Nurşen, Gunduz, Ali Mahir, et al. Prenatal diagnosis of fetal craniofacial teratoma: US, MRI findings, a rare case report. *European Journal of Medical Case Reports*, London 2021;5(4):125–128.
2. Gundry SR, Weley JR, Klein MD. Cervical teratomas in the newborn. *J Pediatr Surg*. 1983;18:382–386.
3. Rothschild MA, Catalano P, Urken M, et al. Evaluation and management of congenital cervical Teratoma: case report and review. *Arch Otolaryngol Head Neck Surg*. 1994;120(4):444–448.
4. Orhideja Stomnaroska, Goran Kocovski, Panche Zdravkovski. Large neck teratoma in a newborn with respiratory distress syndrome: faculty of medicine. *Journal Article.* 2021.
5. JeanYvesn Sichel, RonEliashar, Ido Yatsiv, et al. A multidisciplinary team approach for management of a giant congenital cervical teratoma. *International Journal of Pediatric Otorhinolaryngology*. 2002;65(3):241–247.

Citation: Mohammed SDE, Salaheldien R, Ahmed B. FETUS DIAGNOSED WITH CERVICAL TERATOMA DELIVERED BY EXIT PROCEDURE (EXTRA UTERINE INTRAPARTUM TREATMENT). *MOJ Women's Health.* 2021;10(4):105–107. DOI: 10.15406/mojwh.2021.10.00298