



ESOPHAGEAL DUPLICATION CYST MANAGEMENT IN A 5 MONTH OLD CHILD- CASE REPORT

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ABSTRACT

The aim of the case report is to present the case of Esophageal Duplication Cyst in a 5 month old patient and review of literature . Most Esophageal Cysts are diagnosed in early childhood only .The differential for esophageal duplication cysts include mediastinal cysts like bronchogenic cysts ,pericardial cysts or cystic degeneration of mediastinal tumors . The most common treatment is thoracotomy with cyst excision but less invasive technique include endoscopic , laproscopic or thoracoscopic approach are gaining popularity

KEYWORDS : Esophageal Duplication Cyst , Anaesthesia Management

INTRODUCTION

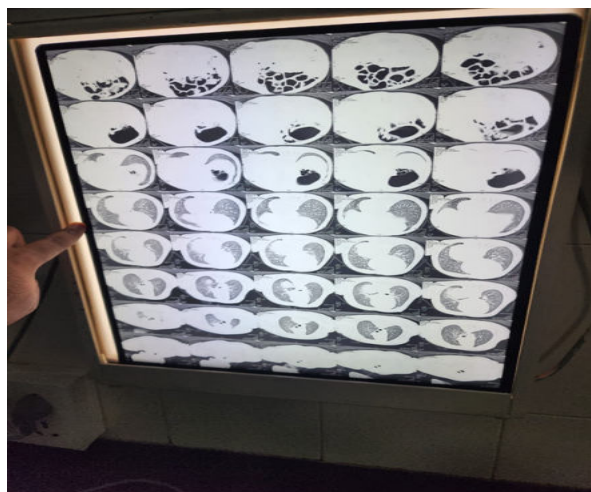
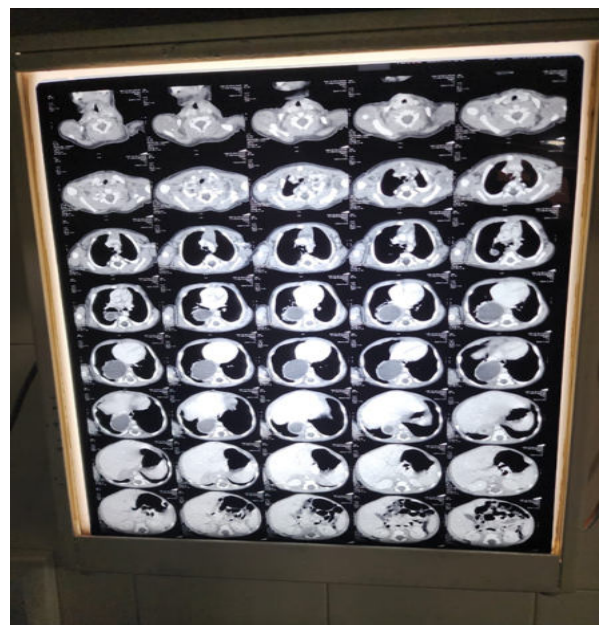
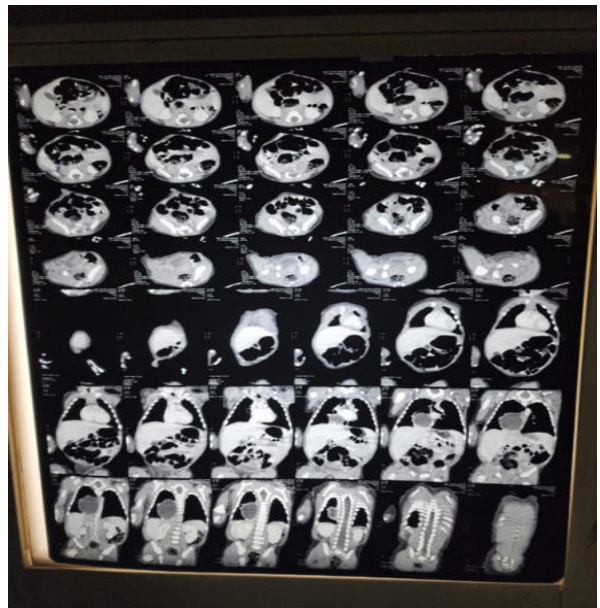
Esophageal Duplication cyst are congenital anomalies of the foregut resulting from aberration of posterior division of embryonic foregut. Most of them are found on mediastinum and manifest themselves as separate masses along or in continuity with the active esophagus. These are rare inherited lesions usually diagnosed in early childhood .Their prevalence remains unknown and they are usually treated either surgically or endoscopically.

Case Study

A 5 month old baby currently weighing 5 kg born to primigravidamother via Emergency lower segment caesarean section in view ofPregnancy induced hypertension, meconium stained amniotic fluid with respiratory distress. Anomaly scan done during antenatal period was suggestive of 27 X 20 mm cystic lesion in the right mediastinum . At birth she had a APGAR score of 3/10 and also was CPAP support for 1 day .After birth also she had complaints of respiratory distress and cough . All the milestones are achieved till date and routine investigations done were also within normal limit . USG chest and HRCT thorax findings revealed the possibility of Oesophageal duplication cyst more than bronchogenic cyst. Currently She presented with complaints of recurrent upper respiratory tract infection

Surgery -

The baby underwent thoracoscopic esophageal duplication cyst excision without any complication

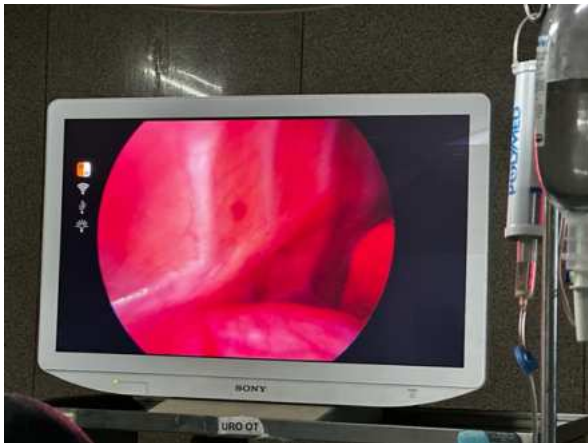


Anaesthesia Management :

- Informed consent , adequate blood reservation and nbm was confirmed.
- Baseline vitals were noted.
- After adequate pre oxygenation and pre medication. with Injection Glycopyrollate , fentanyl according to her weight , patient was induced with propofol and sevoflurane Videolaryngoscope assisted Microcuffed endotracheal tube 3.5 was used to intubate the patient. Ryle tube secured via left nostril.
- The patient was given a left lateral position and was adequately supported.
- Air entry was confirmed .
- Patient was maintained on mixture of sevoflurane , air and oxygen and intermittent atracurium doses according to weight.
- Surgery : Thoracoscopic esophageal duplication cyst excision duration was three hours and intra-op fluid was administered.
- Intra-op blood loss was minimal.
- Surgical duration remained uneventful.
- The patient was reversed with IV Glycopyrolate and IV Neostigmine. The patient was given 100% Oxygen and was shifted for further monitoring to picu.

Post Op Period:

Post operative period was uneventful .Baby was discharged on Day 10 of post operative period after she was accepting orally and had no complains .



DISCUSSION & CONCLUSIONS :

Anaesthetic Challenges:

- | | |
|---------------------|--------------------------|
| Airway | Iv fluids management |
| Positioning | Ventilation |
| Temperature control | Emergence and Extubation |

- Esophageal duplication cyst which was diagnosed in anomaly scan done in Antenatal period , with history Of APGAR score of 3/10 at birth and also history of CPAP support and NICU admission . After birth the baby had complains of respiratory distress and cough All the milestones are achieved till date and routine investigations done were within normal limits
- Anaesthesiologists challenges and concerns in the management of this case were facilitated with multidisciplinary approach
- The key intaroperative focus- Securing airways ,Haemodynamic stability , ventilator optimization during thoracotomy and cyst excision.
- Laproscopic approach gave all the advantages of a minimally invasive surgery.

Early intervention done has provided proper surgical intervention and also good prognosis.

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