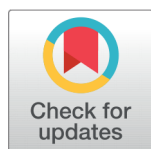


## CASE REPORT



### OPEN ACCESS

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## Congenital Cystic Hygroma — A case report

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### Abstract

Congenital cystic hygroma is a lymphatic lesion that can affect any anatomic subsite on the human body. But in most of cases, the head and neck region are prone to cystic hygroma. Within the neck the posterior triangle tends to be most frequently affected, but there is no significant demographic data.

**Keywords:** Lymphatic; alfa-fetoprotein; vascular endothelial growth factor

### Introduction

Lymphangioma are thought to arise from the failure of lymphatics to connect the venous system. Whereas capillary and cavernous forms of lymphangiomas tend to form in the muscle. This leads to potentially life threatening airway compromise that manifests into noisy breathing.

### Case management

Name : B/O Gowramma, Age : 5 days, Sex : male

The case was informed by the grandmother of the baby educated until the 3<sup>rd</sup> standard in school. The family is from a low income group and the economic status is low. The complaint received was the presence of a swelling in the neck region of the baby that extended to the face.

### History of presenting complaints

A swelling in the neck extending to the face was noticed by USG scan done at

term gestation. Delivery was conducted by Caesarean section and baby cried immediately after birth. The baby was fed with formulated milk & by the next day it was brought to VIMS –OPD.

No H/O fever, cough, cold

No H/O difficulty in swallowing

No H/O suggestive of respiratory difficulty

No H/O suggestive of cyanotic spells

No H/O vomiting, convulsion & jaundice

No H/O bowel/bladder disturbance

### Antenatal history

The case subject is the second child of the couple. The mother received regular ANC check-ups and IFA tablets were consumed as per prescription. There were no history about any other drug intake by the mother or infections and hospital admissions during the gestation period.

An USG scan done at the 5<sup>th</sup> month showed normalcy in growth. But the scan at the 9<sup>th</sup> month detected a swelling on the neck. The 1<sup>st</sup> child of the couple FT

ND, still born (Anomalous baby). H/O in the family reported no H/O DM/HTN/ epilepsy /asthma in family members.

## Personal history

Appetite: Normal, Sleep: Normal, Bowel/bladder: Regular, Diet chart: Lactogen 1, 30 ml per feeding and 10 feeds per day, Treatment H/O: Not significant, Immunisation H/O: Not immunised.

## General physical examination

Baby was comfortable & sleeping on grand mother's lap. No pallor /icterus/ cyanosis/ clubbing / lymphadenopathy/ kilonychia. Heart rate: 162 bpm. Respiratory rate: 45 breaths per min. Abdominal thoracic in pattern. Temperature - afebrile.

## Anthropometry

Height- 47 cms, Weight- 3 kgs, Head circumference: 33cms, Fontanelle- ant - 3\*4 cms, post - 1\*2 cms, Oral cavity: large notched tongue, Spine: Normal, Neck movements: Normal

## Local Examination

Large swelling present in left side of neck & face, extending from under surface of opposite side mandible to lower eyelid of same side. Measuring 10 cms in length, 15 cms breadth. Patchy bluish discoloration on the surface. No dilated veins / scar / pulsations. Soft cystic consistency, no bruit heard.

## Systemic examination

Cardio vascular system: S1, S2 heard, no murmurs.

Respiratory system: NVBS heard, no added sounds.

Per abdomen: Soft, no organomegaly.

## CNS Investigations

Hb% — 14 gm%, TC — 7200 cells/ mm<sup>3</sup>, DC —N — 67, L34, E0, RBS — 45mg/dl, Bl.urea — 7mg/dl, Serum creatinine — 0.7mg/dl, Blood group — B+ ve, HIV/Hbsag — negative, FNAC — presence of serous fluid.

## Anaesthetic procedure

After proper pre- anaesthetic preparation-psychological, physicalandpharmacological.Baby was shifted to O.T at 9.15 am. Anaesthetic technique planned was general anaesthesia with inhalational induction and Oro-tracheal intubation under controlled ventilation.

1. Baby was connected with pre induction monitors — pulseoximeter, ECG



Fig 1.

2. Pre medicated with inj Atropine — 0.15 mg iv
3. Preoxygenation — for 3 mins. Baby was intubated with 3mm size uncuffed ET tube under inhalational induction with N<sub>2</sub>O+O<sub>2</sub>+ sevoflurane 0-5% under adequate anaesthetic depth. IPPV done with JR Circuit.
4. Maintenance: N<sub>2</sub>O +O<sub>2</sub> — (2+2 lts, intermittent sevoflurane — 0.5- 1% Analgesia- inj fentanyl 3µg.i.v
5. Inj. atracurium - 1 mg bolus + 0.25 mg +0.25+ 0.25 +0.25 mg iv. Vitals monitored.
6. Recovery — reversal done by — inj atropine 0.15mg + inj Neostigmine 0.15 mg iv

Recovery was smooth and the baby was extubated on table. Vitals monitored & stable. Complications-nil.

## Post- operative period

Baby was shifted to surgical ICU with supplementation of oxygen by face mask, with adequate analgesia by inj. Diclofenac infusion and proper fluid management were carried out.

## Vitals

Heart rate: 160 bpm respiratory rate: 35 breaths per min, Temp: afebrile, CVS: S1, S2 heard, no murmurs, Respiratory system: NVBS heard. No added sounds.



**Fig 2.**

## Discussion

Cystic Hygromas are abnormal growths that usually appear on a baby neck or head. They consist of one or more cysts.

These are fluid sacs of lymphatics. Pre-operative management of these cases is an anaesthetic challenge.

## Conclusion

Cystic hygroma involving airway is of utmost critical and case management was done by general anaesthesia and lateral intubation with IPPV. Securing airway both preoperatively, intraoperatively and post operatively is the major criteria.

## References

- 1) Miller's textbook of Anaesthesiology 7<sup>th</sup> edition
- 2) Wylie and Churchill textbook 5<sup>th</sup> and 7<sup>th</sup> edition
- 3) Smith's paediatric anaesthesiology
- 4) Stoelting textbook of coexisting diseases.
- 5) Barash textbook of Anaesthesiology.