



Case Report

A rare association of esophageal atresia and tracheoesophageal fistula with microgastria: A case report

Prashant K. Zulpi¹, Anil B. Halgeri¹, Akshay Kalavant B¹, Vijay K. Kulkarni²

Departments of ¹Pediatric Surgery and ²Pediatrics, SDM College of Medical Science and Hospital, Dharwad, Karnataka, India.

*Corresponding author:

Prashant K. Zulpi,
Department of Pediatric
Surgery, SDM College of
Medical Science and Hospital,
Dharwad, Karnataka, India.

prashantkzulpi@gmail.com

Received : 16 June 2021

Accepted : 05 July 2021

Published : 08 March 2022

DOI

10.25259/KPJ_26_2021

Quick Response Code:



ABSTRACT

We present a case of esophageal atresia with tracheoesophageal fistula which was associated with microgastria. Following primary esophageal anastomosis developed leak and went into severe sepsis and died.

Keywords: Esophageal atresia, Tracheoesophageal fistula, Microgastria

INTRODUCTION

Congenital microgastria is a rare anomaly of the stomach resulting from abnormal development of the foregut. This results in tubular stomach with reduced capacity. It is almost always associated with other congenital anomalies.^[1] Association of tracheoesophageal fistula (TEF) with microgastria is a very rare entity.

CASE REPORT

A 1.5 kg preterm was born by LSCS to a primigravida mother of 26 years. Baby was born with drooling of saliva and was kept in NICU. On radiological evaluation was found to have [Figure 1] coiling of tube with absent gastric shadow. However, minimal bowel shadows noted distally. Baby was taken for emergency surgery on day 1 of life. Intraoperatively was found to have esophageal atresia with TEF (Type C) with long gap. Anastomosis is done under tension [Figure 2]. Trans-anastomotic tube was going with difficulty; hence, laparotomy was done and found to have microgastria [Figure 3]. The stomach was so small, tubular could not be delivered outside for gastrostomy; hence, feeding jejunostomy was done. Postoperatively baby was under ventilator support. Later developed anastomotic leak and sepsis following which baby died.

DISCUSSION

Esophageal atresia with tracheoesophageal fistula in association with microgastria is very rare. Several other anomalies are reported in association with microgastria. Microgastria is characterized by megaesophagus with incompetence of gastroesophageal sphincter.^[2] Isolated microgastria is very rare and very few are reported in literature.^[3] The diagnosis of microgastria is usually made by upper gastrointestinal dye study which shows small tubular stomach in midline.

This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial-Share Alike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

©2021 Published by Scientific Scholar on behalf of Karnataka Paediatric Journal



Figure 1: Baby gram showing coiling of tube I upper pouch with absent stomach shadow and minimal distal bowel shadow.

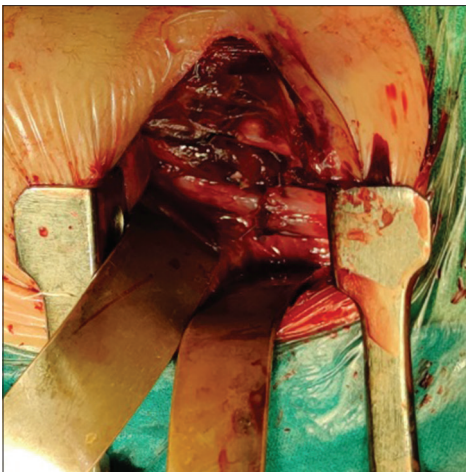


Figure 2: Showing esophageal anastomosis under tension.

In our case, pre-operative baby gram showing absent stomach shadow was a highlighting finding in the presence of minimal distal bowel shadow. Treatment of microgastria can be conservative (or) surgical, depending on severity of microgastria. Conservative treatment includes continuous small frequent feeds (nasogastric/naso-jejunal feeds).^[4] Surgical intervention includes gastric augmentation by creation of Hunt-Lawrence pouch have been described.^[5,6]

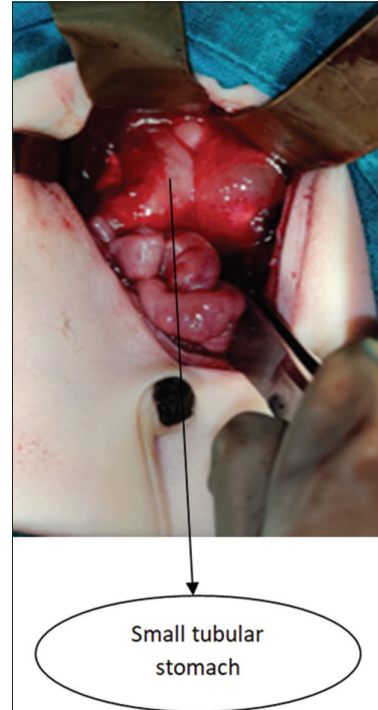


Figure 3: Intraoperatively showing small stomach.

CONCLUSION

A high view of suspicion must be considered in TEF babies if baby gram shows coiling with absence of stomach shadows in presence of minimal bowel shadows.

Cervical esophagostomy could probably save baby instead of primary anastomosis.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Jones VS, Cohen RC. An eighteen year follow-up after surgery for congenital microgastria-case report and review of literature. *J Pediatr Surg* 2007;42:1957-60.
2. Hoehner JC, Kimura K, Soper RT. Congenital microgastria. *J Pediatr Surg* 1994;29:1591-3.

3. Ramos CT, Moss L, Musemeche CA. Microgastria as an isolated anomaly. *J Pediatr Surg* 1996;31:1445-7.
4. Velasco AL, Holcomb GW, Templeton JM, Ziegler MM. Management of congenital microgastria. *J Pediatr Surg* 1990;25:192-7.
5. Shackelford GD, McAlister WH, Brodeur AE, Ragsdale EF. Congenital microgastria and dumping syndrome. *J Pediatr Surg* 1983;18:747-50.
6. Moulton SL, Bouret M, Lynch FP. Congenital microgastria in a premature infant. *J Pediatr Surg* 1994;29:1594-5.

How to cite this article: Zulpi PK, Halgeri AB, Kalavant BA, Kulkarni VK. A rare association of esophageal atresia with tracheoesophageal fistula with microgastria: A case report. *Karnataka Paediatr J* 2021;36:171-3.