



## ORIGINAL RESEARCH PAPER

## Paediatric Surgery

### A CASE REPORT OF RARE CASE OF DOUBLE ATRESIA

**KEY WORDS:** Defective Fusion, Tracheo-Esophageal Fistula, Duodenal Atresia

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#### ABSTRACT

Tracheo-Esophageal Fistula Is An Abnormal Communication Between The Trachea And Oesophagus. Upper Part Of Oesophagus Develops From Retro-Pharyngeal Segment Of Primitive Gut And The Lower Part From The First Part At 4-5 Weeks Of Gestation. A Laryngo - Tracheal Groove Is Formed And Divides Foregut Into Two Longitudinal Furrows. Respiratory Tract Is Then Separated From The Oesophagus. Defective Septum Or Due To Incomplete Fusion Of Trachea Folds Result In Fistula Formation Between Trachea And The Oesophagus. There Are 5 Types Of Tracheo-Oesophageal Fistula . Duodenal Atresia Is The Congenital Absence Or Complete Closure Of Portion Of Lumen Of Duodenum Due To Defective Fusion Of Foregut And Midgut With Failure Of Recanalization .

#### BACKGROUND

A Blind Proximal Pouch With A Distal Tracheo-Oesophageal Fistula Is The Most Common Type. Affected Infants Present Soon After The Birth With Drooling And Cyanotic Episodes On Attempting To Feed. The Diagnosis Is Confirmed When A Nasogastric Tube Goes No Further Than The Upper Oesophageal Pouch On The CRX And Abdominal Gas Signifies The Tracheo - Oesophageal Fistula. Associated Anomalies Are Common And Include Cardiac, Renal And Skeletal Defects. Repair Is Usually Via A Right- Sided Extrapleural Thoracotomy Within A Day Or Two Of Childbirth. The Fistula Is Divided And The Tracheal Side Is Closed. The Oesophageal Ends Are Anastomosed. The Blood Supply Is Poor And The Anastomosis Is Under Tension. Postoperative Complications Include Anastomotic Leak, Stricture, Recurrent Fistula Formation And Gastro-Oesophageal Reflux.

Duodenal Atresia May Take The Form Of A Membrane Or The Proximal And Distal Duodenum May Be Completely Separated. Prenatal Ultrasound Finds A 'Double Bubble' In The Fetal Abdomen With Polyhydramnios. There Is An Association With Down Syndrome. Post Naturally, There Is A Bilious Vomiting If The Atresia Is Distal To Ampulla. A Plain Abdominal X-Ray Also Shows The Double-Bubble. Repair Is By Open Duodenal Membrane With A Modest Central Perforation, Which May Delay Symptoms Until Later Childhood.

Small Bowel Atresia May Be Single Or Multiple Are Probably Secondary To A Vascular Or Mechanical Insult Causing Sterile Infarction Of A Segment Of Gut. They Present With Intestinal Obstruction Soon After Birth.

#### CASE REPORT

A 13 Hours Old Male Child Was Brought To Casualty of DYPH With His Parents With Complaints Of Copious Secretions From Mouth And Nose Which Was Greenish In Color. Baby Was A Full Term Normal Vaginal Delivery And Cried Immediately After Birth .

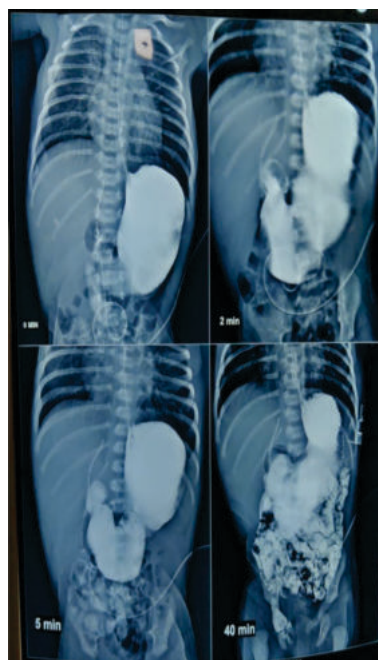
Baby Was Intubated Because Of Desaturation And Respiratory Distress . X-ray Showed Coiling Of Ryle's Tube And Diagnosis Of Tracheo-Oesophageal Was Made.

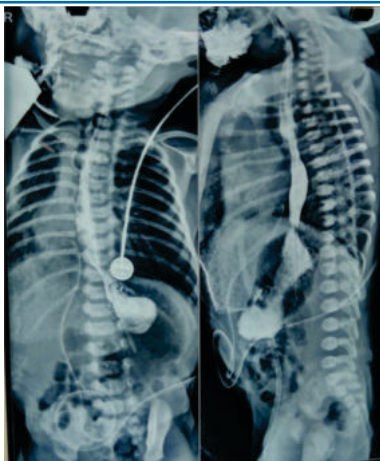
Tracheo- Oesophageal Fistula Repair Was Done Immediately. Infant Was Recover In Well And Then Again After 3 Weeks Had Recurrent Bouts Of Vomiting For Which Dia-Study Was Done Which Showed Double-Bubble Sign. Exploratory Laparotomy With Kimura's Duodenojejunostomy Was Done For Duodenal Atresia With Perforation.



#### Investigation

X-ray And Barium Study Was Done. X-ray Showed Coiling Of Ryle's Tube And Diagnosis Of Tracheo- Esophageal Fistula Was Made. A Dia - Study Was Done Which Was Showed Double Bubble Sign Suggestive Of Duodenal Atresia.





## DISCUSSION

A Surgical Intervention is Always Required to prevent Mortality .

## CONCLUSION

Tracheo-Oesophageal fistula should always be Evaluated as a part of "VACTERL SYNDROME".  
Surgery is the mainstay of treatment .

## Consent

The Consent Of The Patient's Guardians Was Sort For The Publication Of The Case Report.

## Acknowledgement

The Authors Would Like To thank The Dean, Dr. D.Y Patil School Of Medicine, Navi Mumbai, Maharashtra, India For Permission to Publish This Case report.

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