RAMA UNIVERSITY

www.ramauniversity.ac.in

FACULTY OF NURSING

TRACHEO-OESOPHAGEAL FISTULA (TEF)

Nandni Shivhare
Nursing Tutor
R.C.N

INTRODUCTION

- TEF and oesophageal Artesia are the malformation of digestive system, in which oesophagus does not develop properly.
- Oesophagus is a tube that normally carries food from mouth to stomach.

DEFINITION

Oesophageal Artesia- **it is the failure of oesophagus to a form a continuous passage from the pharynx to stomach.**

TEF- **it is an abnormal connection between the trachea and oesophagus.**

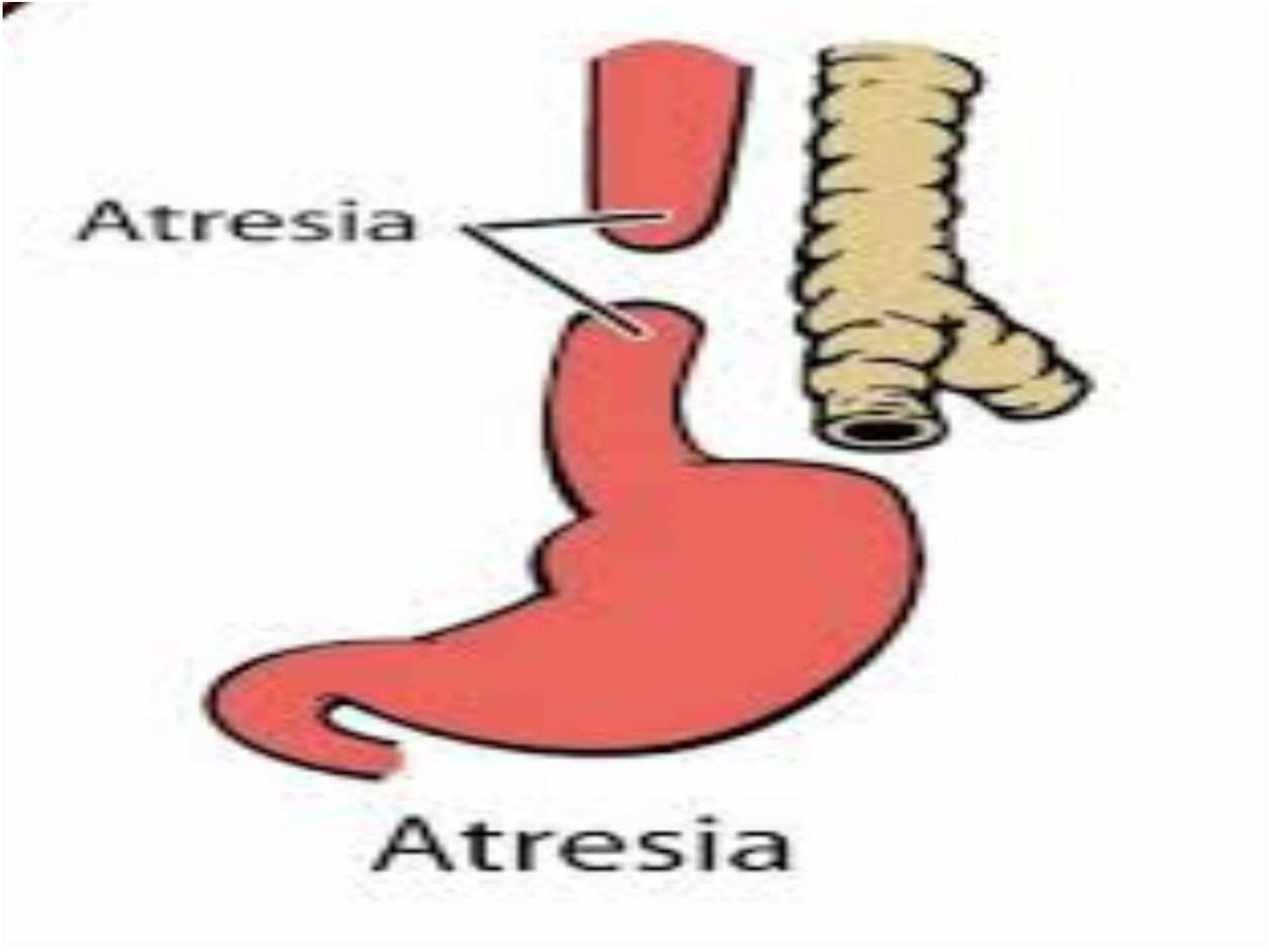
ETIOLOGY

- Unknown
- TEF have other anomalies also that are represented by acronym "VACTERL".
  - V- vertebral column defect
  - A- anorectal malformation
  - C- cardiac defect
  - TE- TEF
  - R- renal anomalies
  - L- limb anomalies

TYPES

(A) Type 1-

- There is a esophageal Artesia and proximal and distal segment of oesophagus are blind.
- There is a no communication between trachea and oesophagus.


Atresia
Atresia

(B) **Type 2-**

In this type oesophageal Artesia is present and the blind proximal segment of oesophagus connect with trachea by fistula


Fistula
Atresia

(C) Type 3-

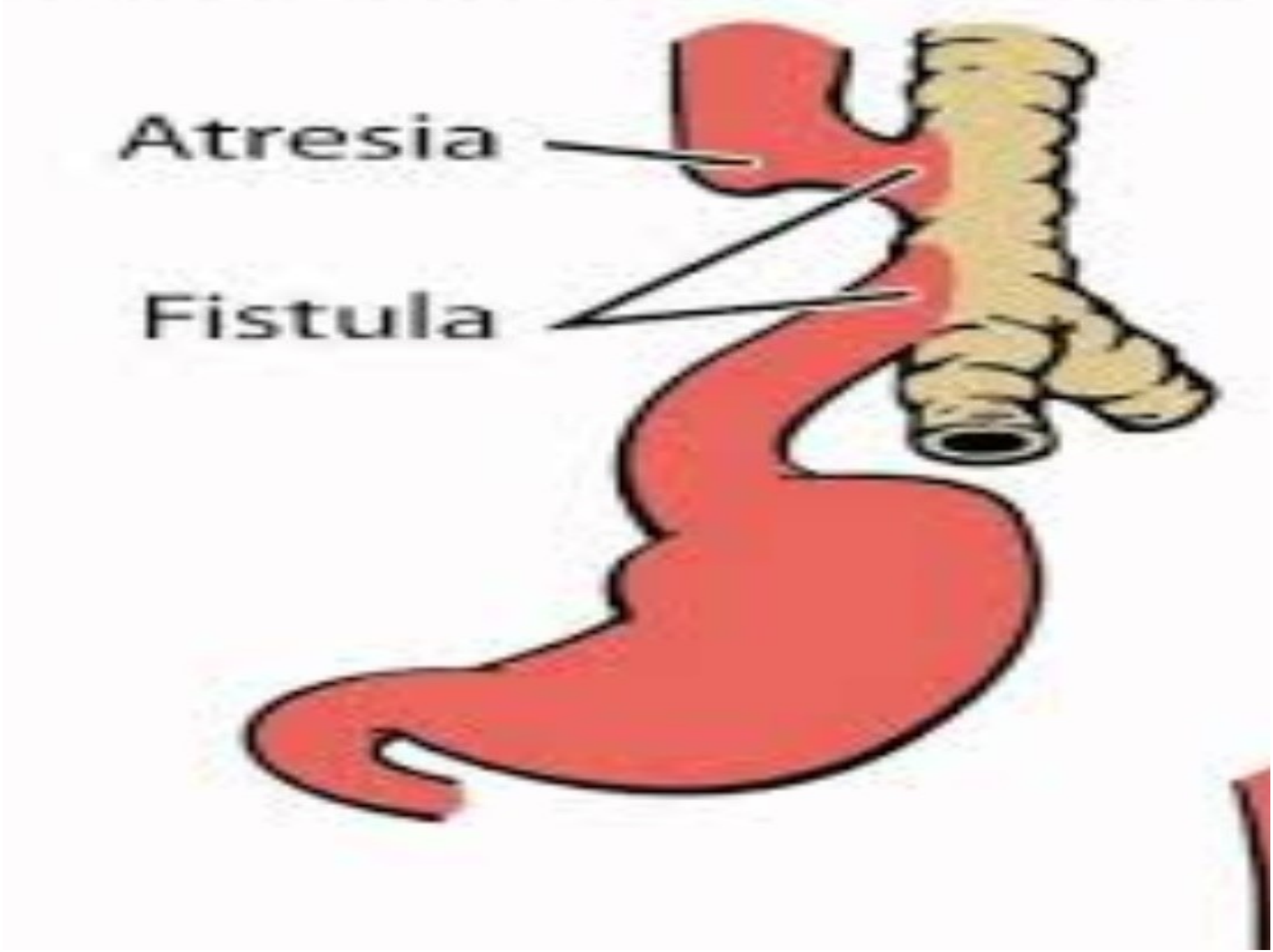
In this type oesophageal Artesia is present, the proximal end of oesophagus is a blind pouch and distal segment of oesophagus is connected by fistula to trachea


Atresia
Fistula

(D) Type 4-

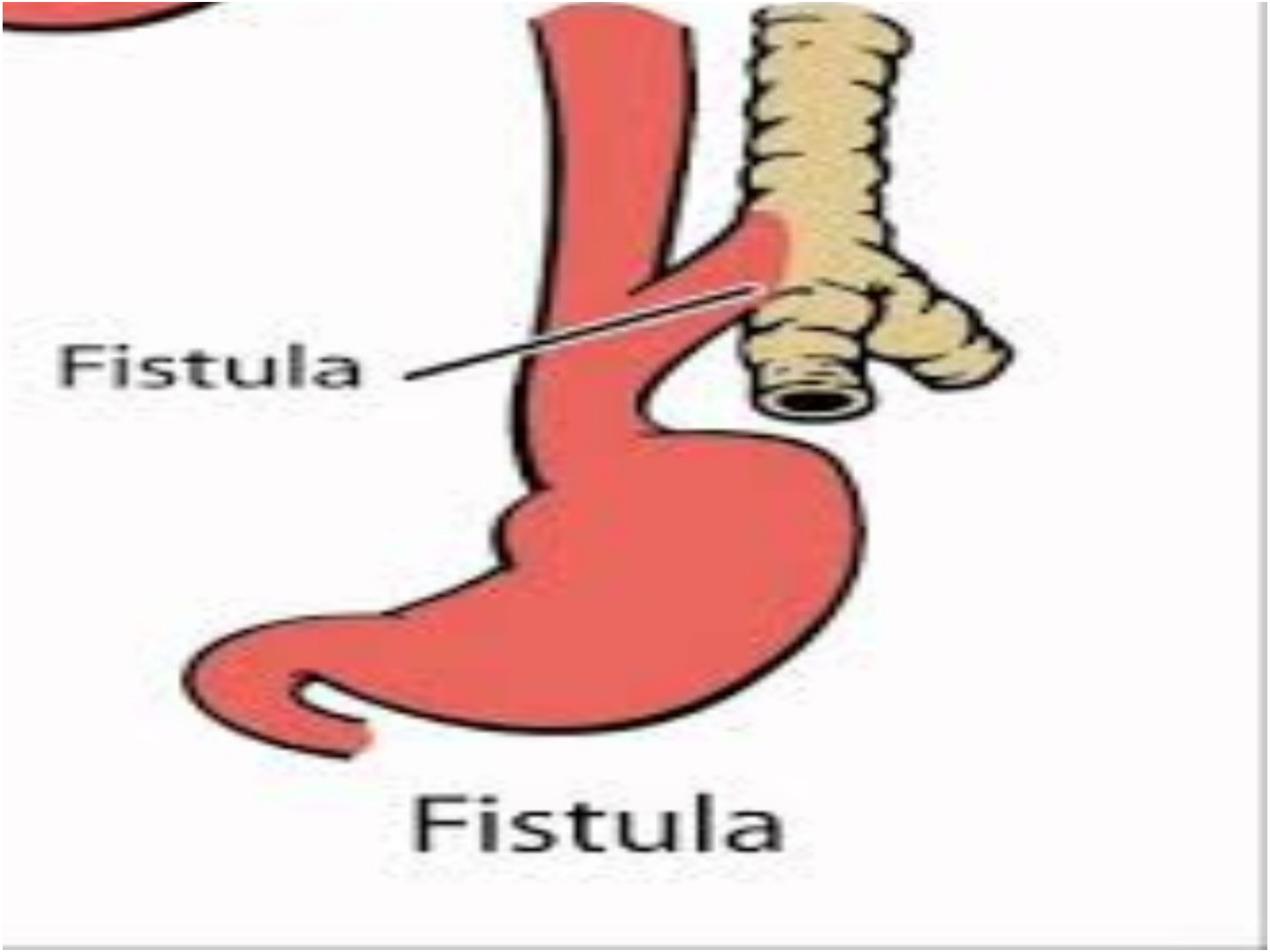
Rared type that occurs in 0.7 % cases.

In this type both upper and lower segment of oesophagus communicate with trachea


Atresia
Fistula

(E) Type 5-

In this type oesophagus and trachea are normal and completely formed but are connected by fistula. This type is also known as (H) type.



Fistula

PATHOPHYSIOLOGY-

Upper part of esophagus is developed from retropharyngeal segment and the lower part of the first part of primitive gut

↓

At 4-5 weeks of gestation the laryngeal-tracheal groove is formed

↓

Two longitudinal furrows develop & separate the respiratory tract permordium from esophagus

↓

Deviation cellular growth of the septum results in formation of fistula between esophagus and trachea

CLINICAL FEATURE

- Infant cough
- Fluid returned through nose and mouth
- Cyanosis
- Excessive secretion coming out nose
- Saliva is frothy
- Abdominal distention
- Pneumonia

DIAGNOSTIV EVALUATION

- History collection
- Physical examination
- USG
- X- Ray
- Fetal MRI
- Bronchoscopy
- Echocardiogram

MANAGEMENT

Surgical management-

- Ligation
- End –to- end anoastomosis

Nursing management-

- Pre- operative-

- As soon as the diagnosis of TEF is made, the attempt to feed the baby is stopped.
- NG tube is put in the upper oesophageal segment and is aspirated frequently.

- **Place the infant in semi-upright position.**
- **Constantly observe the child for symptoms of RDS Like- pallor, cyanosis**
- **IV fluids are administered (Physician order)**

Post operative-

- **A oesophagostomy is made to drain out secretion from upper blind oesophageal pouch so that secretion may not overflow and enter the trachea.**
- **Administer O_2.**

- **Ventilator support may be provided.**
- **Feed the infant orally or by gastrostomy, depending upon the type of surgery done.**
- **After 10-14 days of surgery, before starting oral feed and X- Ray is taken, to find out whether anoastomosis has healed. When healing is occurred, test feeding is given with glucose water.**

Thank
You