



# Miscellaneous Lesions of Trachea and Larynx: Case Report

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## Abstract

Selected images of trachea and larynx are presented. These are shown as congenital, acquired (infection, Laryngeal diverticula, Tumours, Extrinsic lesions causing tracheal compression, Jugular fossa causing paralysis of larynx and Tracheo-esophageal fistula.

**Keywords:** Tracheal lesions; TEF; tumours of trachea

## Introduction, Materials and Methods

A variety of lesions of trachea and larynx can be noted during routine radiographic study and CT of chest. It is important to know their cognisance and report accordingly.

## Results and Observations

**Congenital:** TEF, tracheal bronchus. Tracheoesophageal fistula is an abnormal connection between the esophagus and the trachea. It is associated with different types of esophageal atresia [1] (Figure 1). This is an accessory bronchus with a small opening and is known to cause recurrent pneumonia, as in this X ray [2] (Figures 2 & 3).

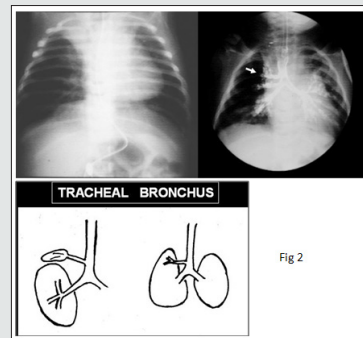


Figure 2: Tracheal bronchus.

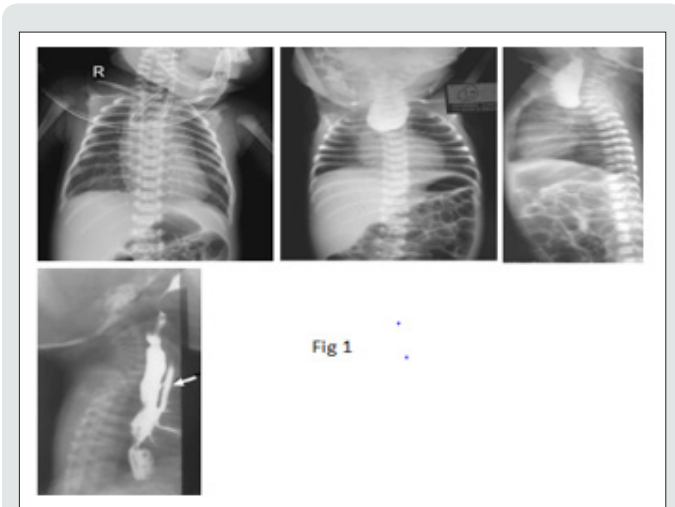


Figure 1: Tracheo-esophageal fistula.

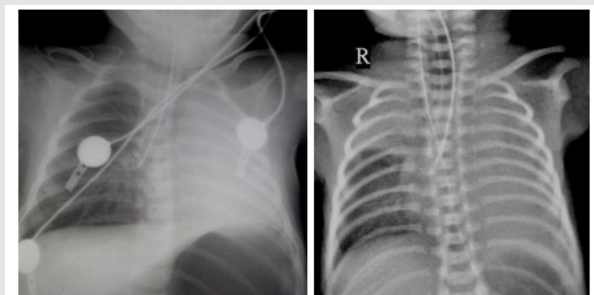


Figure 3: Wrong positions of ETT. Left image- The tip of ETT is in right lower lobe bronchus causing cut-off of left main bronchus and total collapse. After re-positioning, the position of ETT left lung opened up in a short time. Right image- The tip of ETT is further in right lower lobe bronchus causing collapse of right upper lobe.

### Acquired (Figures 4-7)

Lateral view of neck showing smooth narrowing of sub-glottic trachea due to viral infection called Croup (Figure 4). A small air-filled cavity is seen along the right lower wall of trachea due to a diverticulum. This was seen a chance finding on CXR [3] (Figure 5). A boggy swelling was noted in the root of neck on right in this male. CXR showed an air-filled lesion in the neck on right. CT revealed it to be a large cyst with a tiny communication with trachea in APO view. Paratracheal air cysts are not an uncommon incidental finding in routine thoracic imaging. They characteristically occur on the right side, in the region of the thoracic outlet. Occasionally they may mimic pneumomediastinum [4] (Figures 6 & 7).



Figure 4: Infection: viral infection of larynx.

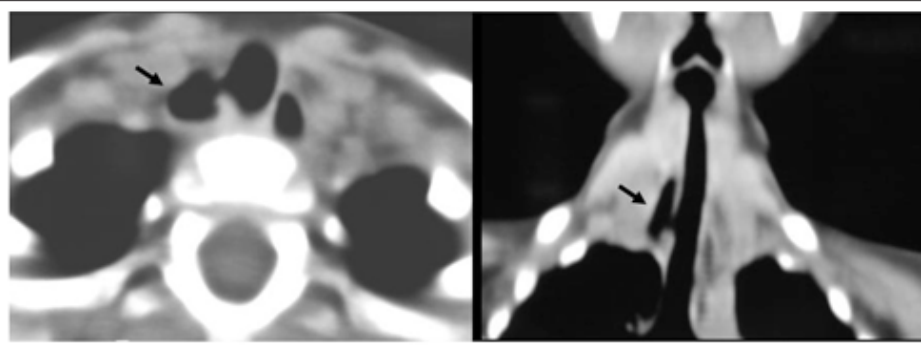


Figure 5: Tracheal diverticulum.

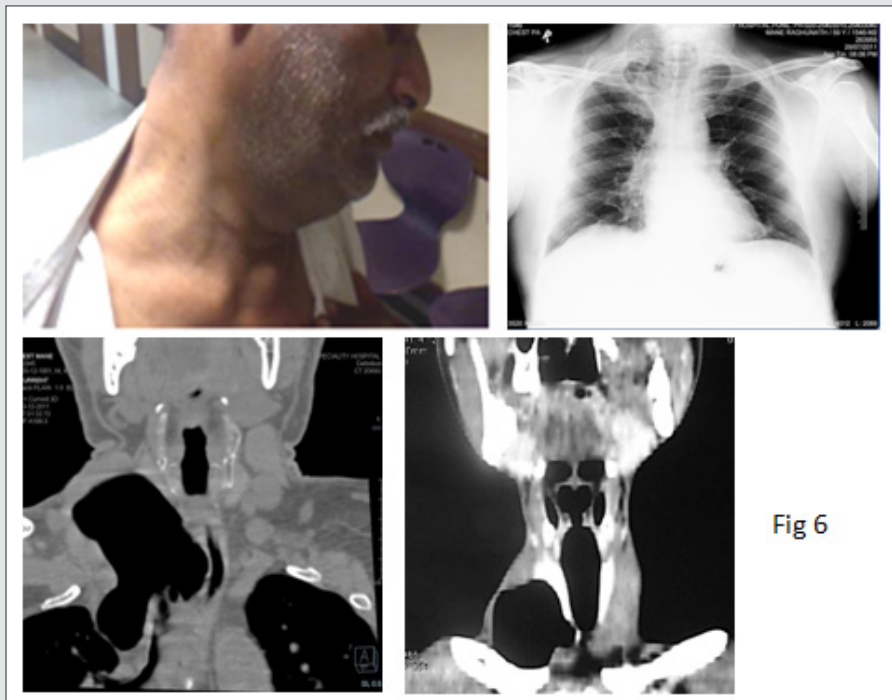
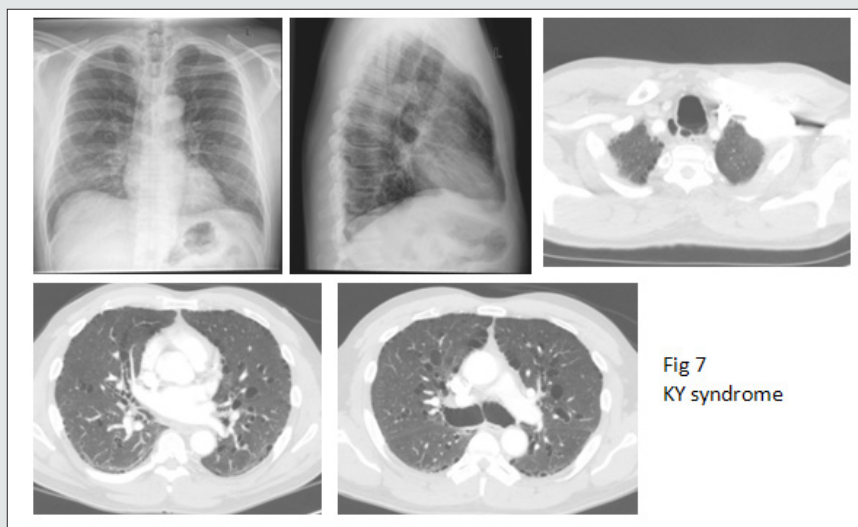


Figure 6: Para-tracheal cyst.

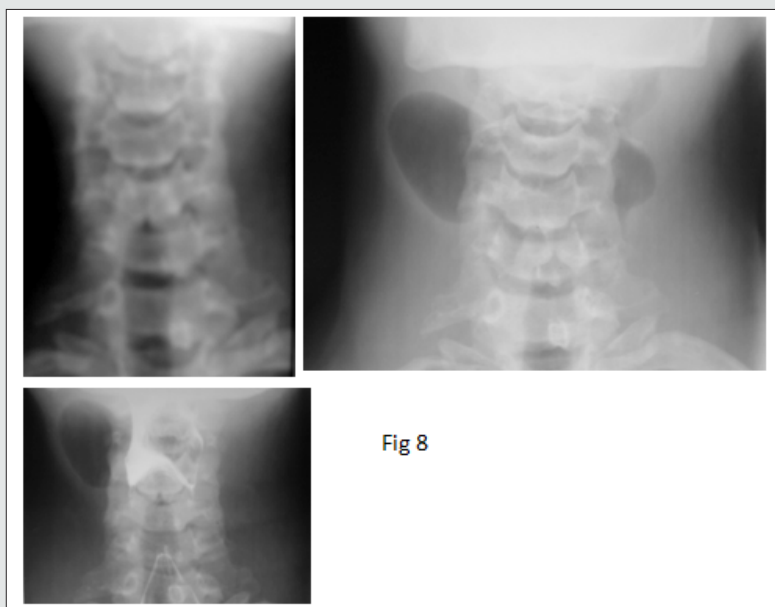


**Figure 7:** Mounier-Kuhn syndrome, or tracheobronchomegaly, is a rare clinical and radiologic condition. It is characterized by dilation of the trachea/bronchi and multiple para-tracheal and lung cysts. Dilatation of trachea and cysts are better appreciated on CT.

### Acquired lesions

- Laryngeal diverticula
- Tumours
- Extrinsic lesions causing tracheal compression
- Jugular fossa causing paralysis of larynx
- Tracheo-esophageal fistula: acquired.

First image is at rest. On straining this young male showed bilateral diverticula increasing in size. This is an external diverticulum. The internal diverticulum remains inside thyrohyoid membrane and confines to the parapharyngeal space. Barium swallow study showed normal pyriform sinuses. g 9-Congenital cyst in vestibule. An oval smooth soft tissue mass in vallecula is due to a cyst [5,6] (Figures 8-13).



**Figure 8:** Laryngeal diverticula in a young male.



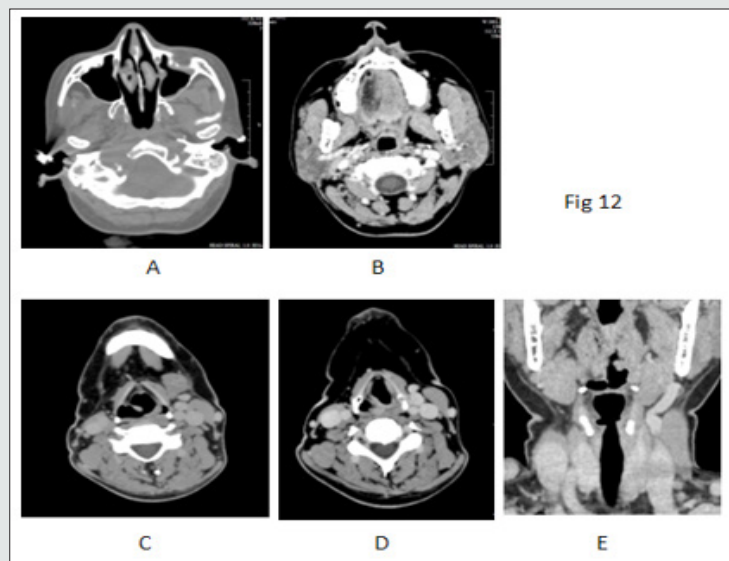
**Figure 9:** A lateral view of neck shows a benign-looking, soft oval tissue mass in the vallecular fossa due to congenital cyst.



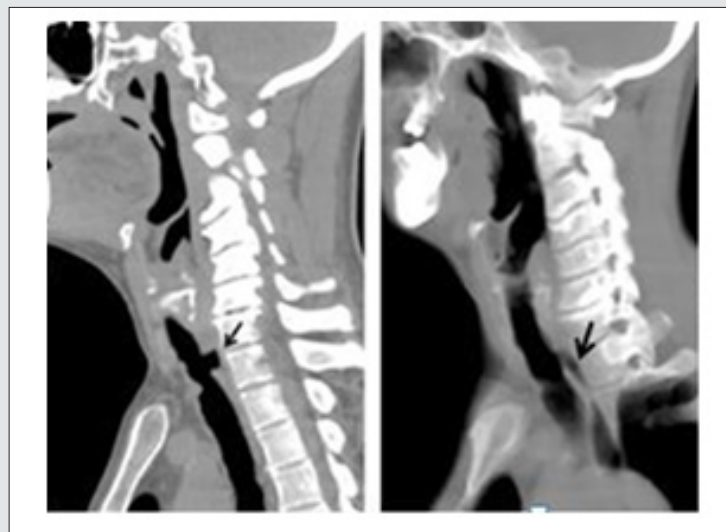
**Figure 10:** This middle-aged man had difficulty in breathing. CXR was normal. CT showed smooth narrowing of both walls of trachea, which proved to be due Ca (arrows). Primary tracheal tumors are very rare. Most (80-90%) are malignant.



**Figure 11:** Extrinsic compression of trachea. This child had grunting due to a soft tissue mass of fluid (cystic hygroma). CXR reveals narrowing and deformity of trachea. CT shows this is due to cystic hygroma.



**Figure 12:** A male 45 years old presented with deafness, dysphagia and hoarseness of voice. This is a case of Vernet syndrome causing motor paralysis of 12<sup>th</sup> Vagus nerve. A) Glomus jugulare tumor b) B) Fatty atrophy of right half of tongue C) Thickened ipsilateral aryepiglottic fold on right D) Enlarged ipsilateral ventricle on right and E) Uvula displaced to left that is normal side.



**Figure 13:** Acquired Tracheo esophageal fistula (arrow) due to injury by a tracheostomy tube [6].

**Conflicts of interests:** Nil

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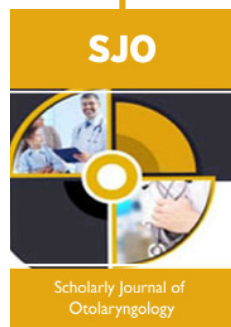


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