A 22 year male patient was admitted to intensive care unit after a road traffic accident with head injury and unconsciousness. He had multiple injuries all over the body. Endotracheal tube was inserted for airway protection and central venous catheterization was done. He was put on ventilator. Antibiotics and supportive care were given. Feeding was started by nasogastric tube. After recovery at about 20 days endotracheal tube was removed. Patient had cough every time during food intake especially liquids after removal of endotracheal tube. He tried to avoid drinking fluids and reduced food intake. He had moderate anemia and coarse crepitations in lower zones of both lungs. Possibility of tracheoesophageal fistula (TEF) was suspected. MRI was done. TEF was confirmed.

TEF is congenital or acquired communication between trachea and esophagus. Majority of acquired TEFs are due to malignancy. Acquired non-malignant TEFs are due to iatrogenic injuries, blunt or penetrating chest trauma, contagious diseases (like tuberculosis, syphilis, histoplasmosis, empyema or lung abscess), inflammations (e.g., Crohn’s disease), ingestion of foreign bodies or corrosives etc. In AIDS patients esophagitis (due to Candida, Mycobacterium etc) may result in fistula formation. Prolonged intubation, an irritating or abrasive tube and high pressure exerted by the cuff (>30 mm Hg) especially when a rigid nasogastric tube is in place, are predisposing factors for development of TEF. Decrease in mucosal blood flow by hypotension or shock and low O₂ delivery to tracheal tissue by hypoxemia, anemia and metabolic acidosis are other predisposing factors. Poor nutrition, infection and steroid use cause tissue alteration predisposing development of TEF. Prolonged intubation with high-pressure endotracheal tube in patients with cachexia, hypoproteinemia and anaemia especially in CA or Koch’s predisposes development of TEF. The differential of this condition needs to be kept in mind in evaluating patients during prolonged intubation. TEF is infrequent with use of high-volume and low-pressure cuffs. The classical presentation of TEF is swallow-cough sequence (Ono’s sign). Increase in tracheal secretions and aspiration during swallowing results in paroxysms of cough and recurrent pneumonia. Patients may try to avoid foods and drinks for fear of choking. Patients may have food particles in expectorated material. The sequelae of TEF are pneumonitis with pulmonary compromise and malnutrition. Bronchoscopy, esophagoscopy, fistulography, CT and MRI might aid the diagnosis of TEF. But clinical suspicion is crucial for early diagnosis and treatment. CT and MRI may be preferable as noninvasive techniques in critically ill or ventilator-dependent patients. Surgical repair usually gives good results in acquired non-malignant TEF. Most effective treatment of TEF from malignancy is esophageal bypass or stenting.

Gouranga Santra*, Narayan Pandit**
*Ex-RMO- cum clinical tutor; **Assistant Professor, Dept. of Radiodiagnosis, North Bengal medical college, Sushrutanager, Darjeeling, Pin-734012

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