Editorial

Bronchorrhoea- an emerging respiratory symptom

Bronchorrhoea is arbitrarily defined as watery sputum production of over 100 ml per day.[1] Up to 9 Liters per day has been reported.[2] It can be caused by primary lung malignancy especially of bronchioloalveolar cell type and metastases to lung especially from cells of glandular origin (e.g. adenocarcinoma of cervix, colonic adeno-carcinoma and pancreatic cancer).[3, 4, 5] It can also be caused by non-malignant conditions like chronic bronchitis, asthma, and endobronchial tuberculosis. There are three postulated pathophysiological mechanisms for bronchorrhoea:

1. Hyper-secretion of mucus-glycoprotein and other glandular products from mucus-glycoprotein producing cells–neutrophils accumulating in airway mucosa may stimulate goblet cells secretion.
2. Increased transepithelial chloride secre-tion- this can be mediated by receptors for prostaglandins (PGE2, PEF2α) or secretin in the bronchial epithelium.
3. Excessive transudation of plasma prod-ucts into the airway.[6]

Bronchorrhoea has negative impact on both survival and quality of life. It can cause excessive cough, sleep disturbance and dyspnoea. When severe, it may lead to respiratory failure, dehydration and electrolyte disturbance.

The management of bronchorrhoea includes general supportive measures to promote comfort, maintenance of fluid and electrolyte balance, and measures to reduce bronchial secretion production. The following seven entities have been tried in reducing bronchial secretions:

1. Radiotherapy and traditional chemo-therapy
2. Anticholinergic agents
3. Macrolides
4. Pulsed methylprednisolone
5. Inhaled indomethacin
6. Gefitinib (EGFR-TKI)
7. Octreotide

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