

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

Cough , sputum and hemoptysis

Lecture by : ●

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Learning Objectives

At the end of this lecture students should be able to: •

1- Define cough, sputum and hemoptysis. •

2- List common causes of cough with main feature of each. •

3- Identify the types of sputum with their causes. •

4- Identify the causes of hemoptysis. •

5- Outline the management of hemoptysis. •

Cough

Cough is the most frequent symptom of respiratory disease. It is caused by stimulation of sensory nerves in the mucosa of the :

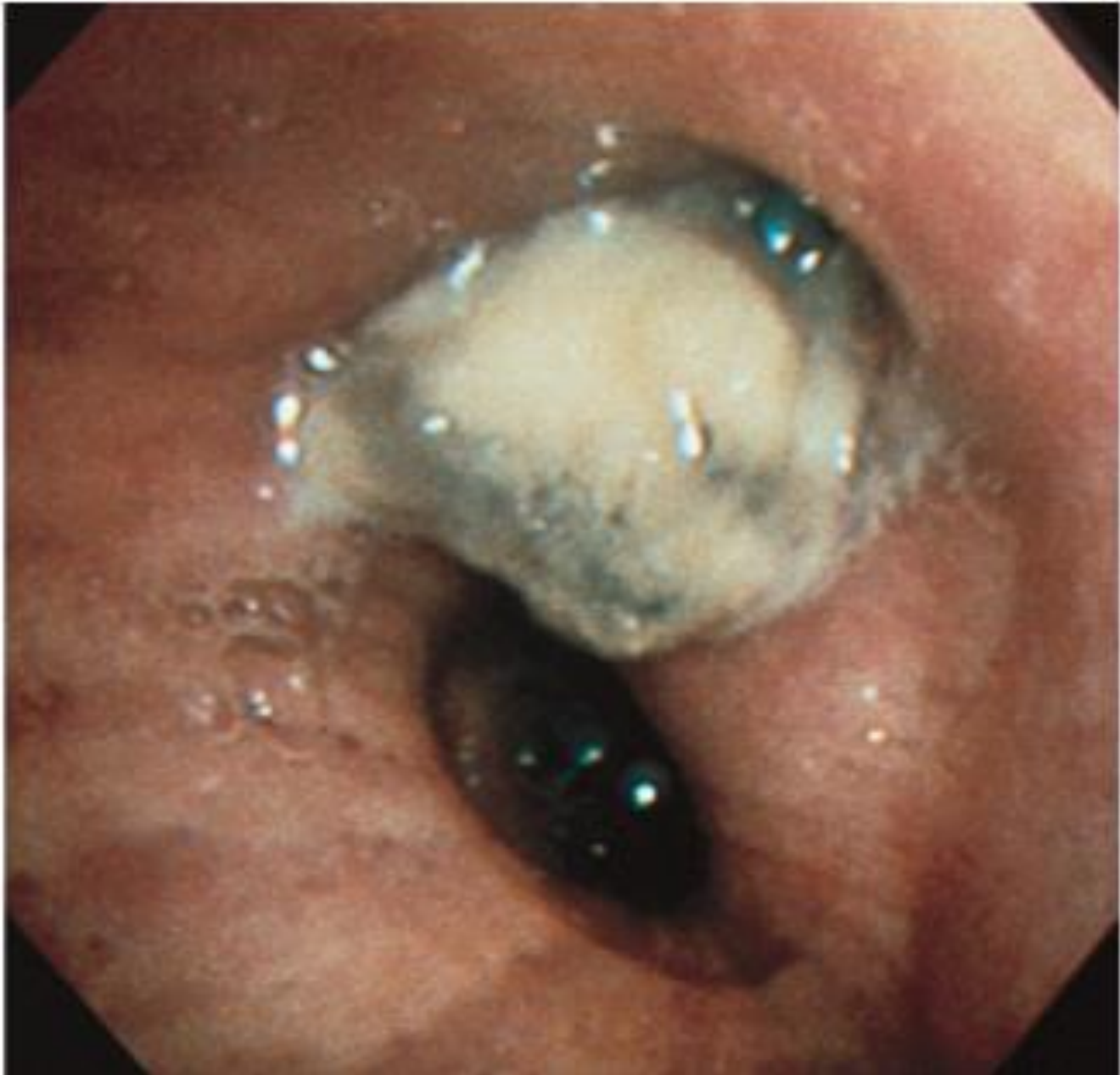
- 1-pharynx,
- 2-larynx,
- 3- trachea
- 4-and bronchi.

19.6 COUGH

Origin	Common causes	Clinical features
Pharynx	Post-nasal drip	History of chronic rhinitis
Larynx	Laryngitis, tumour, Whooping cough, croup	Voice or swallowing altered, harsh or painful cough Paroxysms of cough, often associated with stridor
Trachea	Tracheitis	Raw retrosternal pain with cough
Bronchi	Bronchitis (acute) and COPD	Dry or productive, worse in mornings
	Asthma	Usually dry, worse at night
	Bronchial carcinoma	Persistent (often with haemoptysis)
Lung parenchyma	Tuberculosis	Productive, often with haemoptysis
	Pneumonia	Dry initially, productive later
	Bronchiectasis	Productive, changes in posture induce sputum production
	Pulmonary oedema	Often at night (may be productive of pink, frothy sputum)
	Interstitial fibrosis	Dry, irritant and distressing

Patients with chronic cough present more of a diagnostic challenge, especially those individuals with a normal examination, chest X-ray and lung function studies: ●

- 1- Postnasal drip. ●
- 2- cough variant asthma. ●
- 3-ACE inhibitors. ●
- 4- Gastroesophageal reflux. ●
- 5- Burdetella pertussis. ●
- 6- Intrabronchial tumor or foreign body. ●



Sputum

TYPES: ●

1- Serous: Clear, watery, frothy and pink.

causes: - Acute pulmonary edema. ●

- Alveolar cell cancer. ●

2- mucoid: Clear, grey, white and viscid. ●

causes: - COPD. ●

- Asthma. ●

3- Purulent: ●

a- yellow:-Acute bronchopulmonary infection
-Asthma. ●

b- Green: long standing infection. ●

4- Rusty: Rusty red:-pneumococcal pneumonia. ●

●

Ask about: ●

1- Amount. ●

2- color. ●

3- Taste or smell ●

4- Solid material. ●

HEMOPTYSIS

Coughing up blood, irrespective of the amount, is an alarming symptom and nearly always brings the patient to the doctor. ●

CAUSES OF HAEMOPTYSIS

Bronchial disease

- Carcinoma*
- Bronchiectasis*
- Acute bronchitis*
- Bronchial adenoma
- Foreign body

CAUSES OF HAEMOPTYSIS

Parenchymal disease

- Tuberculosis*
- Suppurative pneumonia
- Lung abscess
- Parasites (e.g. hydatid disease, flukes)
- Trauma
- Actinomycosis
- Mycetoma

CAUSES OF HAEMOPTYSIS

Lung vascular disease

- Pulmonary infarction*
- Polyarteritis nodosa
- Goodpasture's syndrome (p. 502)
- Idiopathic pulmonary haemosiderosis

CAUSES OF HAEMOPTYSIS

Cardiovascular disease

- Acute left ventricular failure*
- Mitral stenosis
- Aortic aneurysm

CAUSES OF HAEMOPTYSIS

Blood disorders

- Leukaemia
- Haemophilia
- Anticoagulants

Management

According to cause. ●

References

- 1- Davidson's Principle and Practice of Medicine. ●
- 2- Harrison's Principles of Internal Medicine. ●

THANK YOU FOR •
LISTENING