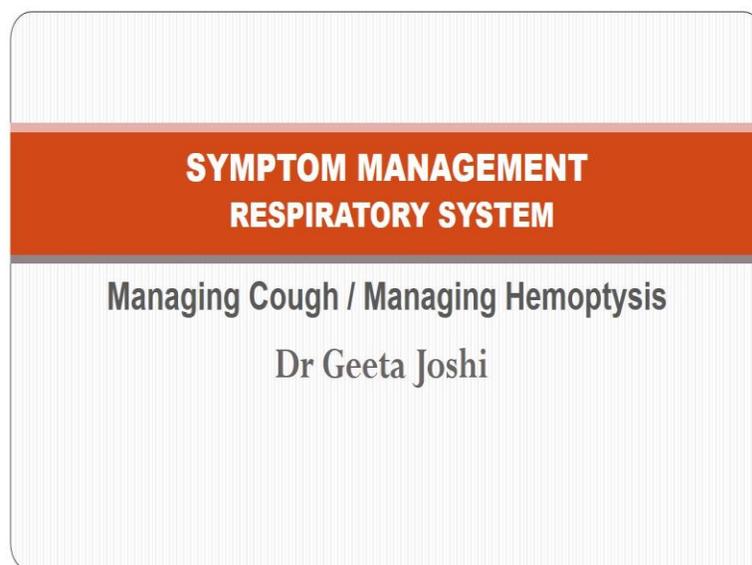


**Basic Certificate in Palliative Care**  
**Dr. Geeta Joshi**  
**Dr. Piyush Gupta**  
**Dr. Col. Yashavant Joshi**  
**International Institute of Distance Learning**  
**Indian Institute of Technology, Kanpur**

**Week-08**  
**Lecture 04: Respiratory Symptoms Management - Part II**

(Refer Slide Time: 00:15)



Hi Learners. I am Murali Krishnan working as a project engineer at Media Technology Center, IIT-Kanpur. I also act as a teaching assistant for this course. This session is in continuation with the SYMPTOM MANAGEMENT-RESPIRATORY SYSTEM. Here, I am going to cover topics on Managing Cough and Managing Hemoptysis. This presentation is prepared by Dr. Geeta Joshi Madam of NAPCAIM.

(Refer Slide Time: 00:35)

## Managing Cough

First let's discuss about managing cough, something we've all experienced at one point or another.

(Refer Slide Time: 00:40)

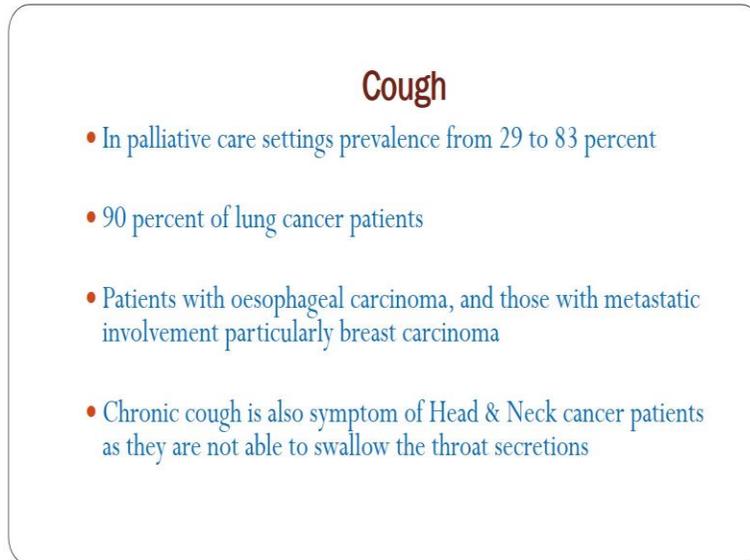
### Cough

- Cough is a normal mechanism in respiratory system designed to protect the individual from potential harm,
- But when mediated by disease becomes chronic, it can be a cause of great suffering
- It helps the ciliated airways to expel mucous, secretions etc into the pharynx either to be spat out or swallowed

Coughing is a natural reflex in our respiratory system. It's like our body's alarm system, protecting us from potential harm. However, when coughing sticks around due to illness, it can become a real problem, causing a lot of discomfort and suffering. Essentially, coughing helps our airways to get rid of unwanted stuff like mucus and secretions. It's

like a cleaning mechanism, pushing these substances into the pharynx so we can either spit them out or swallow them.

(Refer Slide Time: 01:10)



**Cough**

- In palliative care settings prevalence from 29 to 83 percent
- 90 percent of lung cancer patients
- Patients with oesophageal carcinoma, and those with metastatic involvement particularly breast carcinoma
- Chronic cough is also symptom of Head & Neck cancer patients as they are not able to swallow the throat secretions

In palliative care, coughing is quite common, affecting anywhere from 29 to 83 percent of patients. It's especially prevalent among those with lung cancer, with about 90 percent of patients experiencing it. Patients with oesophageal carcinoma and metastatic breast carcinoma also frequently suffer from coughing. Additionally, individuals with head and neck cancer may experience chronic coughing due to difficulty in swallowing throat secretions.

(Refer Slide Time: 01:40)

## Cough

### Cause

- Respiratory infection

### Management

- Antibiotic [if purulent sputum]
- Suppressant
- Expectorant
- Physiotherapy
- Nebulised saline

Let's discuss on cause and Management of Respiratory infection. Coughing can occur from respiratory infections, like the common cold or pneumonia. When dealing with coughs caused by infection, several approaches can relieve symptoms: Antibiotics are prescribed if the sputum is purulent, indicating a bacterial infection. Suppressants can help control the urge to cough. Expectorants assist in loosening mucus to make it easier to cough up. Physiotherapy techniques may aid in clearing airways. Nebulised saline can help hydrate airways and loosen mucus buildup.

(Refer Slide Time: 02:20)

## Cough

### Cause

- Airway diseases  
Asthma/COPD
- Malignant obstruction

### Management

- Bronchodilator
- Corticosteroid
- Physiotherapy
- Corticosteroid
- Suppressant
- Nebulised local anaesthetic
- Physiotherapy

Let's discuss on cause and Management of airway diseases like asthma or chronic obstructive pulmonary disease (COPD). Treating coughs associated with these conditions involves: Bronchodilators which helps to relax and open up the airways. Corticosteroids which helps to reduce inflammation in the air passages. Physiotherapy methods which helps in improving breathing and clearing mucus from the airways.

Also, Coughing can be caused by a malignant obstruction. Addressing this issue involves: Corticosteroids which helps to reduce inflammation and swelling. Suppressants helps out to ease the urge to cough. Nebulized local anesthetics helps to numb the airways and reduce cough reflex. Physiotherapy methods to assist in clearing mucus and improving breathing.

(Refer Slide Time: 03:05)

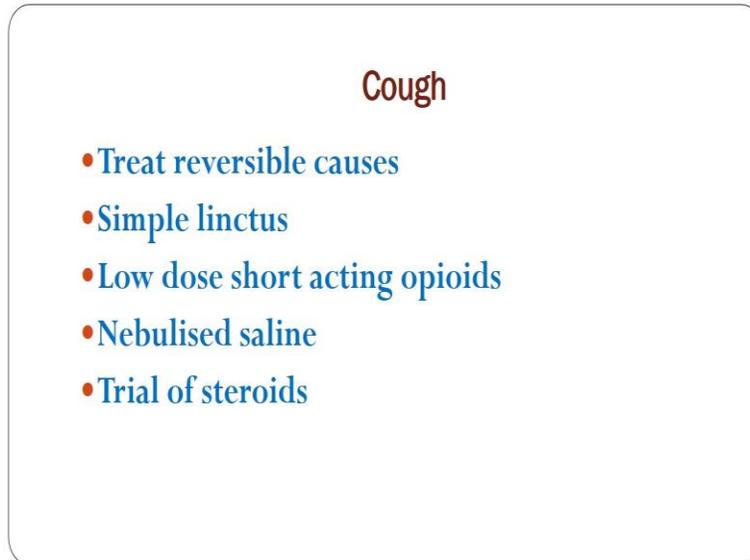
Cough	
Cause	Management
<ul style="list-style-type: none"><li>• Drug induced [e.g. ACE inhibitor]</li></ul>	<ul style="list-style-type: none"><li>• Stop or change drug</li></ul>
<ul style="list-style-type: none"><li>• Oesophageal reflux</li></ul>	<ul style="list-style-type: none"><li>• Position patient upright</li><li>• Antireflux agent</li></ul>
<ul style="list-style-type: none"><li>• Aspiration of saliva [e.g motor neuron disease, multiple sclerosis]</li></ul>	<ul style="list-style-type: none"><li>• Anticholinergic [to reduce saliva]</li><li>• Nebulised local anaesthetic [to reduce sensation]</li></ul>

Coughing can be triggered by certain medications, like ACE inhibitors. To address this issue: Stop or change the drug responsible for inducing the cough. Oesophageal reflux can contribute to coughing and it can be managed by Positioning the patient upright to reduce reflux.

Consider using an antireflux agent to reduce symptoms. Aspiration of saliva can occur in conditions like motor neuron disease and multiple sclerosis. In order to manage, consider

using an anticholinergic medication to reduce saliva production. Also, use nebulized local anesthetic to reduce sensation.

(Refer Slide Time: 03:45)



Some of the treatment options for cough are listed out here: Treat reversible causes is to address underlying issues. For example, if the cough is caused by a respiratory infection or allergies, treating the infection or managing the allergies may help reduce the cough.

Provide simple linctus to soothe the throat. Consider low dose short-acting opioids for symptom relief. Use nebulized saline to help clear the airways. In some cases, a trial of steroids may be necessary for management.

(Refer Slide Time: 04:15)

## Managing Hemoptysis

Now let us discuss on managing hemoptysis which is a distressing symptom often encountered in palliative care settings.

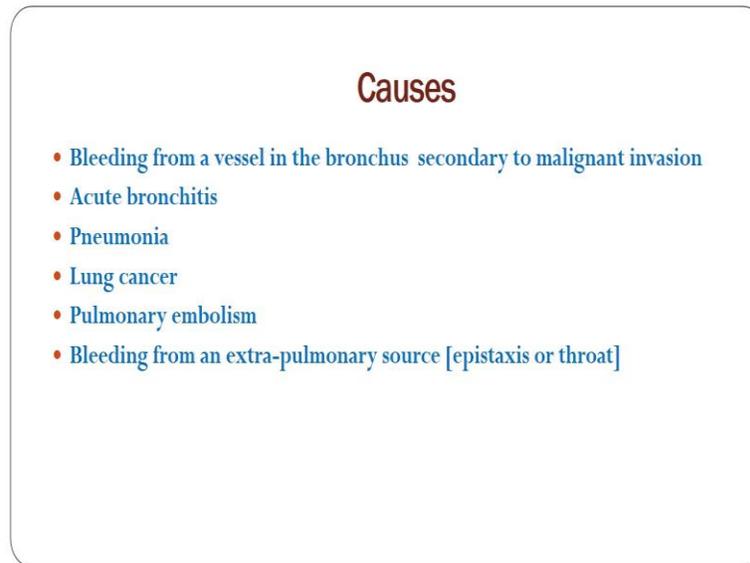
(Refer Slide Time: 04:20)

### Haemoptysis

- Haemoptysis is coughing up of blood
- Massive haemoptysis  
Expectoration of between 200 and 1000 ml of blood in 24 hrs

Haemoptysis refers to the coughing up of blood from the respiratory tract. It can range from mild to severe. Massive haemoptysis is characterized by the expectoration of between 200 and 1000 ml of blood in 24 hours. This volume can be alarming and requires prompt medical attention.

(Refer Slide Time: 04:40)



Some of the causes of Haemoptysis are listed out: Bleeding from a vessel in the bronchus secondary to malignant invasion which occurs when cancerous cells invade the blood vessels in the bronchial tubes. Acute bronchitis: It is an Inflammation of the bronchial tubes and it can lead to coughing up blood. Pneumonia: It is a Lung infection which can cause damage to the lung tissue and blood vessels, resulting in bleeding. Lung cancer: Tumors in the lungs can erode blood vessels, leading to bleeding. Pulmonary embolism which is a Blood clots that travel to the lungs and can cause damage to lung tissue and blood vessels, resulting in bleeding. Bleeding from an extra-pulmonary source: Epistaxis refers to Nosebleeds and bleeding from the throat can sometimes be mistaken for coughing up blood from the lungs.

(Refer Slide Time: 05:30)

## Management

- Specks of blood in sputum
  - Seek source of bleeding and treat accordingly
  - In terminally ill, No treatment, Assurance
  - Cough suppressant such as codeine 30-60mg PO q hrly
- Streaks or small blobs of blood in sputum
  - Oral hemostatic agent: Tranexamic acid 500mg PO b.d
  - Watchful waiting

"When addressing haemoptysis, a multifaceted approach is often necessary to effectively manage this distressing symptom. If there are just specks of blood, it's important to find out where the bleeding is coming from and treat it. In terminally ill patients, treatment might not be necessary, but reassurance is required. A cough suppressant like codeine can also help. For Streaks or small blobs of blood in sputum, an oral hemostatic agent like Tranexamic acid can be given. It's also important to keep a close watch on the patient's condition.

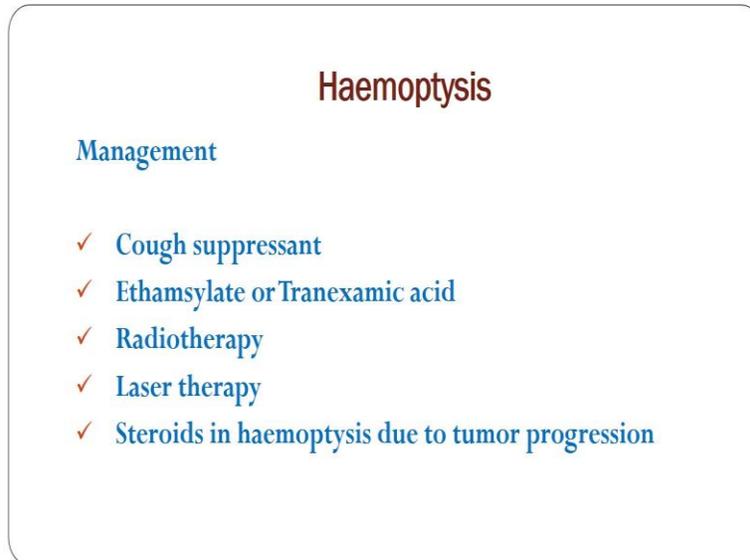
(Refer Slide Time: 06:05)

## Management

- Hemoptysis persisting or increasing despite oral hemostatic agents
  - External radiation therapy or laser therapy
- Massive haemoptysis
  - Sedate the patient [opioids, Benzodiazepines]
  - Colored towels/bedding to allay the fear of the patient

Hemoptysis persisting or increasing: If bleeding continues despite oral hemostatic agents, external radiation therapy or laser therapy may be considered. Massive hemoptysis: For severe bleeding, sedating the patient with opioids or benzodiazepines can help. Using colored towels or bedding can also help the patient and reduce fear.

(Refer Slide Time: 06:30)



**Haemoptysis**

**Management**

- ✓ Cough suppressant
- ✓ Ethamsylate or Tranexamic acid
- ✓ Radiotherapy
- ✓ Laser therapy
- ✓ Steroids in haemoptysis due to tumor progression

Cough suppressant: It helps reduce coughing. Ethamsylate or Tranexamic acid medications can help in controlling bleeding by promoting blood clotting. Radiotherapy and Laser therapy can be used to target and shrink tumors that may be causing the bleeding. Steroids: In cases where the bleeding is due to tumor progression, steroids may be prescribed to reduce inflammation and bleeding. Thank you.