

# Madigan Army Medical Center

## Referral Guidelines

### Hemoptysis

#### Diagnosis/Definition

Hemoptysis is the coughing of blood from the lower respiratory tract below the vocal cords. Epistaxis, bleeding gums and gastrointestinal bleeding occasionally give the illusion of hemoptysis but should be excluded to the greatest extent possible by history and physical exam.

#### Initial Diagnosis and Management

- Common causes of hemoptysis include lower respiratory tract infections, neoplasm and pulmonary infarction. The many infectious causes of hemoptysis include acute bronchitis, flare-up of chronic bronchitis, pneumonia, anaerobic lung abscess and cavitary lung diseases associated with necrotizing bacteria, fungi or mycobacteria. Management depends on the amount of hemoptysis and the underlying cause.
- Patients with hemoptysis should receive a thorough examination of the nasopharynx, neck and chest; a chest x-ray, CT Scan of the Chest and laboratory evaluation to include CBC, Chemistry and coagulation studies. In the appropriate clinical setting for pulmonary embolism, CTangiogram should be considered..
- Discontinuation of anticoagulant and antiplatelet therapies should be considered in all cases of moderate to severe hemoptysis.

#### Ongoing Management and Objectives

- Management by degree of hemoptysis. The amount of hemoptysis per 24 hours should be determined by history and observation.
- Mild hemoptysis. Such patients have less than 50 ml of hemoptysis per 24 hours. In most cases hemoptysis is associated with mucous secretions due to bronchitis (and a negative chest x-ray/CT Scan of the Chest). These patients should receive antibiotics for bronchitis as outpatients with primary care follow up within 72 hours. Patients with pulmonary embolism should be admitted for anticoagulant therapy.
- Moderate hemoptysis. These patients have 50 to 300 ml per 24 hours of hemoptysis. Such patients should receive the evaluation above, be admitted, and receive in-patient consultation by the Pulmonary Service.
- Massive hemoptysis. These patients have more than 300 ml per 24 hours of hemoptysis. Such patients should receive the evaluation above and be admitted to intensive care with evaluation by Critical Care Service and considered for possible intubation for definitive airway control.

#### Indications for Specialty Care Referral

- Patients with mild hemoptysis and chest x-ray evidence of neoplasm or cavitary lung disease should receive outpatient Pulmonary consultation within 72 hours.

- Patients with mild hemoptysis and negative chest x-ray despite 7 days of antibiotic therapy should receive CT of the chest (with contrast if possible) and outpatient Pulmonary consultation within 7 days.
- Patients with smoking history of 15 pack years or more, or age over 40 years should receive a routine Pulmonary consultation to consider bronchoscopy even if hemoptysis resolves.

### **Criteria for Return to Primary Care**

Return to Primary Care consists of resolution of hemoptysis and the exclusion of a new pulmonary disease process as causative of hemoptysis.

### **References:**

Pathogenesis, evaluation, and therapy for massive hemoptysis. Thompson AB, Teschler H, Rennard Clin Chest Med. 1992;13(1):69.

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Referral Guidelines require review every three years.

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Clinical Practice and Referral Guidelines Administrator