

GUIDELINES FOR FLEXIBLE FIBREOPTIC BRONCHOSCOPY

INDICATIONS

A) DIAGNOSTIC USES

1. To evaluate lung lesions of unknown etiology that appear on the chest x-ray (**lung malignancy is always the top priority and should be given very early appointment**)
2. To assess airway patency
3. To investigate unexplained hemoptysis (where TB work up is negative), unexplained cough , localized wheeze or stridor
4. To search for the origin of suspicious or positive sputum cytology
5. To investigate the etiology of unexplained paralysis of a vocal cord or hemidiaphragm, superior vena cava syndrome, chylothorax or unexplained pleural effusion (where pleural biopsy is negative)
6. To evaluate problems associated with endotracheal tubes such as tracheal damage , airway obstruction or tube placement
7. To obtain material from microbiologic studies in suspected pulmonary infections
8. To evaluate the airways for suspected bronchial tear or other injury after thoracic trauma
9. To evaluate a suspected tracheoesophageal fistula, interstitial lung disease or bronchiectasis
10. To determine the location and extent of respiratory tract injury after acute inhalation of noxious fumes or aspiration of gastric contents
11. To obtain material for study from the lungs of patients with diffuse or focal lung diseases

B) THERAPEUTIC USES

1. To remove retained secretions or mucus plugs not mobilized by conventional noninvasive techniques
2. To remove foreign bodies
3. To remove abnormal endobronchial tissue or foreign material by use of forceps or laser techniques
4. To perform difficult intubations

CONDITIONS INVOLVING INCREASED RISK

1. Lack of patient cooperation
2. Recent myocardial infarction (delay bronchoscopy for at least 6 weeks) or unstable angina (not recommended to do bronchoscopy)
3. Partial tracheal obstruction
4. Unstable bronchial asthma
5. Respiratory insufficiency associated with moderate to severe hypoxemia or any degree of hypercapnia

6. Lung abscess (danger of flooding the airway with purulent material)
7. Uraemia and pulmonary hypertension (possible serious hemorrhage after biopsy)
8. Obstruction of superior vena cava (possibility of bleeding and laryngeal oedema)
9. Debility, advanced age and malnutrition
10. Unstable cardiac arrhythmia
11. Respiratory failure requiring mechanical ventilation
12. Disorders requiring laser therapy, biopsy of lesions obstructing large airways or multiple transbronchial lung biopsies

THE DANGER OF A SERIOUS COMPLICATION FROM BRONCHOSCOPY IS ESPECIALLY HIGH IN PATIENTS WITH THE FOLLOWING CONDITIONS

1. Malignant arrhythmia
2. Profound refractory hypoxemia (**do not request bronchoscopy if oxygen saturation is ≤ 90 percent with or without oxygen supplements**)
3. Severe bleeding diathesis that cannot be corrected when biopsy is anticipated

CONTRAINDICATIONS

1. Absence of consent from the patient or his/her representative
2. Bronchoscopy by and inexperienced person without direct supervision
3. Bronchoscopy without adequate facilities and personnel to care for emergencies such as cardiopulmonary arrest , pneumothorax or bleeding
4. Inability to adequately oxygenate the patient during the procedure
5. unstable patients (e.g. wheezing, in shock, severe anaemia)

ADDITIONAL COMMENTS

1. In most patients with undiagnosed pulmonary disorders and in those requiring therapeutic intervention, bronchoscopy is but one component of their overall evaluation or treatment
2. Out patients may undergo bronchoscopy in the hospital in a day-care setting
3. Bronchoscopy should not be employed routinely as a substitute for conventional noninvasive techniques for mobilizing pulmonary secretions
4. Bronchoscopy is not a routine initial procedure in the evaluation of unexplained cough
5. Bronchoscopy is not routinely necessary to obtain sputum for diagnostic study in cases of pneumonia or acute bronchitis

NB: These guidelines were modified from the American Thoracic Society Guidelines.

It is advisable to admit your patients one day before bronchoscopy if they come from far away.

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