Haemoptysis

Haemoptysis

Diseases causing repeated haemoptysis include carcinoma, bronchiectasis, carcinoid tumours and some infections. Severe - mitral stenosis is now a rare cause. Patients with repeated - haemoptysis should be investigated, at the very least by chest radiography and bronchoscopy . Haemoptysis following trauma may be from a lung contusion or injury to a major airway . Treatment depends on the underlying cause. Common associated chest symptoms include cough with or without sputum, pain, breathlessness, hoarseness and more general symptoms of systemic upset, including fatigue and loss of weight. Occasionally , chest disease may cause palpitations - owing to a trial fibrillation. Any of these symptoms in associa - tion with haemoptysis requires urgent investigation. Investigation Bronchoscopy Flexible bronchoscopy (Table 60.4) may be performed with the patient awake and the oropharynx anaesthetised with topical lignocaine (Figure 60.11). The bronchoscope is passed - into the nose or mouth and through the vocal folds under direct vision. As the scope is flexible, its tip can be directed into the segmental bronchi with ease. Tissue and sputum samples may be obtained for diagnostic purposes. There is a greater range of movement with this instrument, but the biopsies are relatively small and suction limited. Rigid bronchoscopy requires general anaesthesia in most instances. It is ideal for therapeutic manoeuvres, such as removal of foreign bodies, aspiration of blood and thick secre - tions, and intraluminal surgery (laser resection or stent place - ment). The surgeon and the anaesthetist share control of the airway . The bronchoscope is passed under direct vision into the oropharynx, behind the epiglottis, until the vocal folds are seen and introduced into the trachea. The trac heal rings and the carina should be easily seen. Advancing the bronchoscope into the RMB or LMB reveals the orifices of the more peripheral bronc hi. Operability of an endobronchial tumour may be assessed in terms of its location (e.g. the proximity of a lesion to the carina). Complications are rare but include bleeding, pneumothorax, laryngospasm and arrhythmia.

TABLE 60.4 Uses of bronchoscopy. Diagnostic Con /f_i rmation of disease: carcinoma of the bronchus; in /f_l ammatory or

infective processes Investigative Tissue biopsy Preoperative Before lung resection assessment Before oesophageal resection Persistent haemoptysis Therapeutic Removal of secretions Removal of foreign bodies Stent placement, endobronchial resection, etc.

Rigid bronchoscopy can be combined with endobron chial interventions to tackle airway tumours; these techniques include use of laser or cryotherapy , with heat or cold respec tively , to excise potentially obstructing endobronchial tumours y patency and breathing. and improve airwa Other techniques of biopsy of intrathoracic lesions are often necessary to confirm diagnosis, stage disease and plan treatment. T he options range from percutaneous needle biopsy under radiological control (typically CT scan) to open (V ATS) lung biopsy . Endobronchial ultrasound (EBUS) and naviga tional bronchoscopy are alternative airway techniques used to obtain intrathoracic biopsies. Summary box 60.4 Biopsy hazards /uni25CF /uni25CF /uni25CF Tracheal obstruction may present acutely as a life-threatening emergency or insidiously with little in the way of symptoms until critical narrowing and stridor occur. The more common causes of airway narrowing are outlined in Table 60.5 . Treatment depends on the underlying cause. Tracheostomy may be required to overcome the obstruction, but there are few indications to do this as an emergency . Tracheal replacement resection of up to 6 /uni00A0 cm of trachea is possible. Sleeve resections of the major bronchi are also possible.

(b) Figure 60.11 (a) Rigid and /f_l exible bronchoscopes. (b) View past the carina into the left main bronchus with a tumour seen in the bronchial lumen. Bleeding disorders Systemic anticoagulation Pulmonary hypertension TABLE 60.5 Causes of airway narrowing. Intraluminal Inhaled foreign body Neoplasm Intramural Congenital stenosis Fibrous stricture (post intubation or tuberculosis) Extramural Neoplasm (thyroid cancer, secondary deposits) Aortic arch aneurysm

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