

Pulmonary hydatid disease

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The lung is the second commonest organ affected after the liver. The size of the cyst can vary from very small to a considerable size. The right lung and lower lobes are slightly more often involved. The cyst is usually single, although multiple cysts do occur and concomitant hydatid cysts in other organs, such as the liver, are not unknown. The condition may be silent and found incidentally. Symptomatic patients present with cough, expectoration, fever, chest pain and sometimes haemoptysis. Silent cysts may present as an emergency because of rupture or an allergic reaction. - Uncomplicated cysts present as rounded or oval lesions on chest radiography. Erosion of the bronchioles results in air being introduced between the pericyst and the laminated membrane and gives a fine radiolucent crescent, the 'meniscus' or 'crescent' sign (Figure 6.15). This is often regarded as a sign of impending rupture. When the cyst ruptures, the crumpled collapsed endocyst floats like a lily on the residual fluid, giving rise to the 'water-lily' sign on CT scan (Figure 6.16). Rupture into the pleural cavity results in pleural effusion. CT scan defines the pathology in greater detail. The mainstay of treatment of pulmonary hydatid is surgery. Medical treatment is less successful and considered when surgery is not possible because of poor general condition or diffuse disease affecting both lungs, or recurrent or ruptured cysts. The principle of surgery is to preserve as much viable lung tissue as possible. The exact procedure can vary: cystotomy, capitonnage, pericystectomy, segmentectomy or occasionally pneumonectomy.

Summary box 6.11 Pulmonary hydatid disease /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF /uni25CF

The second most common organ involved Size of the cyst has a wide variation May present as an incidental finding Clinical presentation may be elective or as an emergency because of rupture Plain radiograph shows 'meniscus' or 'crescent' sign; CT shows 'water-lily' sign Ideal treatment is surgical - various choices are available

(b) Owing to the stigma attached to the word 'leper', RG Cochrane suggested that the best name for leprosy is 'Hansen's disease'. Robert Greenhill Cochrane, 1899-1985, medical missionary who became an international authority on leprosy; he devoted his time to leprosy patients in South East Asia, particularly India. Gerhard Henrik Armauer Hansen, 1841-1912, physician in charge of a leper hospital near Bergen, Norway.

Figure 6.15 Hydatid cysts of the lung, one intact (solid arrow), one ruptured (hollow arrow) showing the lamellar membrane floating like a water lily (solid arrowhead) (courtesy of Professor Saibal Gupta, MS, FRCS, Professor of Cardiovascular Surgery, Kolkata, India and Dr Rupak Bhattacharya, Kolkata, India). Figure 6.16 Computed tomographic scan showing the 'water-lily' sign (arrow). While on a high-altitude trip a young mountaineer complained of sudden shortness of breath, cough and copious expectoration consisting of clear fluid and frothy material. At first thought to be due to pulmonary oedema, it turned out to be ruptured hydatid cyst, successfully

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