

115 年奇美醫院胸腔內科臨床病例討論會

1 時間：115 年 06 月 23 日 PM 4:00-5:00

2 課程活動題目：胸腔影像綜合討論 - Mediastinal Tuberculous Lymphadenitis

3 地點：奇美醫學中心 10 樓空橋討論室

4 主講人：柯獻欽

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6 摘要：

Introduction:

Isolated hilar and paratracheal lymphadenopathy is a common sign of tuberculous infection in children and in adults with HIV infection. However, in adults, mediastinal lymphadenopathy without a parenchymal lung lesion is unusual and is more common in non-white people. It has been attributed to environmental factors, previous exposure to tuberculous infections, and differences in susceptibility and immunological reactions. The incidence of isolated intrathoracic tuberculous lymphadenitis in our study was 2% of 1700 new cases of tuberculosis over a four-year period. In a study by Dhand et al., the incidence was 5.8%, while Baran et al. reported a lower incidence of 0.25%. We found right paratracheal lymphadenopathy in all 34 patients, as in other studies. Mediastinal involvement may occur with or without lung lesions. It has to be differentiated from diseases such as sarcoidosis, lymphoma, and metastases.

The diagnostic yield of sputum examination is low in patients without lung lesions. None of our patients had acid-fast bacilli in their sputum. Dhand et al. reported that 24% had acid-fast bacilli in their sputum. In a study by Khan et al. sputum smears and cultures showed no acid-fast bacilli. The value of bronchoscopy in these patients was examined by Baran et al. in 1995. They found endobronchial abnormalities in 15 of 17 patients with intrathoracic tuberculous lymphadenopathy. Khan et al. reported 20% abnormal findings on bronchoscopy. In contrast, Cameron decided that the procedure had no diagnostic advantage. In our study bronchoscopy gave the diagnosis in only 3 of the 34 patients (9%). This low rate may be explained by the lack of parenchymal lesions in any of our patients. We did not do bronchoscopic transtracheal and transbronchial needle aspiration although their use for the diagnosis of tuberculous mediastinal lymphadenopathy has been described.

Mediastinoscopy is the procedure of choice for the diagnosis of mediastinal masses or lymph nodes provided that they are accessible. It provides easy access to the paratracheal and superior subcarinal lymph nodes. Numerous studies confirmed that mediastinoscopy is safe and it has the advantage of direct visualisation and palpation of the mediastinum, which allows larger biopsy specimens to be taken. It causes minimal mortality and morbidity. The diagnostic value of mediastinoscopy was

investigated by Porte et al. in 398 patients with mediastinal lymphadenopathy. The sensitivity, specificity, and accuracy were 94%, 100%, and 95%, respectively. Puhakka reported 10/2021 (0.5%) major complications after mediastinoscopy and no deaths.

Chest Computed Tomographic Scan

Chest CT films revealed mediastinal lymphadenopathy with multiple low density areas, but no pulmonary lesions. There were no abnormal findings on neck, abdominal or pelvic CT. A PPD skin test was strongly positive, but *M. tuberculosis* bacilli were not found in the sputum. Mediastinal tuberculous lymphadenitis was diagnosed histologically and bacteriologically from specimens obtained by mediastinoscopy. Fiberoptic bronchoscopy did not reveal tracheobronchial tuberculosis. Follow-up chest CT three months after the start of antituberculosis chemotherapy with isoniazid, rifampicin and ethambutol hydrochloride showed that the mediastinal lymph nodes were decreased in size. Mediastinal tuberculous lymphadenitis in adults is rare, but the number of reports has increased. Mediastinal tuberculous lymphadenitis in adults must be distinguished from other causes of mediastinal masses.

Other Image Modality

Bronchoscopy has a low diagnostic yield in isolated tuberculous mediastinal lymphadenopathy in the absence of lung lesions. Mediastinoscopy is the investigation of choice and is safe. A course of six months' antituberculous drugs is adequate treatment for most patients. Sudden enlargement of tuberculous lymph nodes during and after treatment remains important and combined treatment with steroids may be required in these patients.