

SUMMARY AND CONCLUSION

Diagnosis of mediastinal lesions was in the past a clinical and radiologic problem. This big deal is now regressed by the invension of new imaging modalities of digital radiography e.g., CT. and MRI. especially with the marked improvement of the image quality by new generations of them. The cross-sectional CT. images display the fine anatomic detail of this area with great precision and often yield unique and useful diagnostic information directly affecting the management or prognosis of the patient, and avoiding the necessity of thoracotomy or mediastinoscopy especially with the use of CT.-guided fine needle aspiration biopsy of mediastinal tumours. The use of CT. and/or MRI in the diagnosis of mediastinal vascular lesions make the dependence upon aortography in this respect is minimal or relegated.

The aim of this work is to study the role of different imaging modalities in the diagnosis of mediastinal masses. Normal anatomy of the mediastinum, pathology, clinical presentation of the patients and different radiographic findings of mediastinal masses by different imaging techniques were discussed in details .

In this study 60 cases with clinical or plain radiographic findings suggestive of mediastinal masses. They were 37 males and 23 females with their ages ranged from 5 to 65 years. All cases were subjected to full clinical examination and plain chest radiography (Postero-anterior and lateral views) followed by CT scan with dynamic contrast study for most of the cases. Other radiographic techniques like barium study, myelography DSA, and ultrasonography were used as a supplemental procedures in certain cases for final diagnosis.

All data of the 60 cases are tabulated and analysed. They were classified according to their locations in the anterior, middle and posterior mediastinal compartments. Also, they were discussed according to the pathological nature of the mediastinal mass lesion into the following groups.

- Vascular lesion, 11 cases :

Comprised dissecting aortic aneurysm, saccular aneurysm of the descending thoracic aorta, congenital aneurysm of the first part of the right subclavian artery, superior vena caval obstruction and cases of aneurysmal dilatation of the pulmonary artery and its main branches.

- Lymphomas and lymphadenopathy, 21 cases :

Comprised cases of Hodgkin's and non-Hodgkin's lymphomas and lymphosarcomas, tuberculous lymphad-

enopathy, sarcoid lymphadenopathy and malignant metastatic lymphadenopathy.

- Central bronchogenic carcinoma invading the mediastinum, 5 cases

- Neurogenic tumours, 4 cases :

Comprised cases of ganglioneuroma, malignant schwannoma and lateral thoracic meningocele.

- Paravertebral mass lesion, 4 cases :

Comprised Pott's disease of dorsal spine, multiple myeloma and paravertebral deposits.

- Thymolipoma, 1 case.

- Thyroid masses, 3 cases.

- Hernias, 4 cases :

Comprised Morgagni's hernias, hiatus hernia and one case of post-operative colon-by-pass.

- Oesophageal neoplasm, 1 case.

- Miscellaneous cases, 4 cases :

Comprised, haemangiopericytoma, recurrent germinoma, encysted mediastinal pleural effusion and lymphatic cyst.

- Pericardial mass lesions, 2 cases :

Comprised pericardial cyst and pericardial malignant mesothelioma.

The role of computed tomography in approaching the final diagnosis of these cases was very accurat

especially with the use of dynamic contrast study and CT. guided biopsy in some cases. In few cases, especially with cases of hernias CT. scan was not used because the final diagnosis was approached by barium studies.

By this study we can conclude that CT. scan of the mediastinal (especially with dynamic contrast study and CT. guided aspiration biopsy) is now used to characterize the mediastinal mass lesions through determination of its attenuation values or enhancement, extent of the lesion and accurate localization and even detect mass lesions not suspected clinically or from chest radiographs. So precized diagnosis is finally approached.