



REMARKS

1 Plain radiograph

- 1.1 Posterior-anterior (PA) and lateral chest radiographs are appropriate initial investigations although the chest films are almost never specific.

2 Nuclear medicine

- 2.1 Choice of nuclear medicine imaging modality depends on clinical suspicion.
- 2.2 Fluorodeoxyglucose (FDG) PET/CT is useful in assessing the metabolic activity of the mediastinal mass, and helpful in characterizing the lesion. It guides subsequent invasive investigations and is helpful in staging malignancy. It is also useful in monitoring treatment response in various malignancies.
- 2.3 Technetium-99m (Tc-99m) pertechnetate thyroid scintigraphy is useful for confirming presence of thyroid tissue if retrosternal goiter is suspected.
- 2.4 FDG PET/CT, Gallium-67 scintigraphy and white blood cell scintigraphy are useful in characterizing an infective mass or abscess in mediastinum.

3 CT

- 3.1 CT is the most versatile and valuable imaging modality for confirming or excluding, localizing and characterizing a mediastinal mass.
- 3.2 CT is usually adequate for diagnosis and further studies are not necessary.
- 3.3 CT also examines the lungs, which is critically important in patients who may have a thoracic neoplasm.
- 3.4 CT is the gold-standard imaging modality for the pre-operative evaluation of patients with retrosternal goiter. CT is essential to define the extent and position of a retrosternal goiter. Iodinated contrast medium should be avoided because it would interfere with subsequent radionuclide imaging.
- 3.5 Often the mass has non-specific characteristics and requires biopsy for definitive diagnosis.

4 MRI

- 4.1 If CT defines a mass but subtle relationships of the mass to the spine and neural foramina need to be evaluated, or if chest wall invasion needs to be evaluated in more detail, MRI would be useful.
- 4.2 MRI is also an appropriate alternative for patients who cannot tolerate the iodinated contrast medium needed for CT, and for children and pregnant women who should avoid exposure to ionizing radiation.

REFERENCES

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