Incidental detection of mediastinal tumour in an elderly patient

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Patient: 95 years, female

Clinical History:

A 95-year-old woman presented with intermittent diarrhoea of 4 months duration. A chest x ray was ordered as a part of routine investigation which showed a widened mediastinum. CT scan of the chest demonstrated a mediastinal lipoma. She was totally asymptomatic from it.

Imaging Findings:

An otherwise healthy 95-year-old woman presented with intermittent diarrhoea of 4 months duration. A chest x ray was performed as part of her routine investigation on the acute admissions unit. This showed a widened mediastinum although the patient denied any thoracic symptoms. A CT scan of the chest was requested to characterize the abnormality. CT chest showed large fatty superior mediastinal mass lesion extending from the thoracic inlet down to the level of the carina containing one or two fibrous septa with appearances consistent with a mediastinal lipoma. The aorta was markedly atheromatous and ectatic, particularly in its descending thoracic portion. No focal active lung lesion was evident. No finding of any relevance was noted in the upper abdomen. As the patient was asymptomatic nothing was done about the mediastinal lipoma. The patient's diarrhoea improved during her stay in hospital and stool examination results did not show anything significant. She was discharged after 10 days.

Discussion:

Mediastinal lipomas are rare. They comprise less than 1% of all mediastinal tumours [1]. They arise from the fetal embryonal white fat. The tumour can cause recurrent chest infection, dyspnoea, respiratory distress, or even asphyxia, due to compression on trachea or bronchi [2]. On the contrary it may be totally asymptomatic and incidentally detected as in our patient. Initial diagnosis may be by chest x ray showing an enlarged mediastinum as in this patient. X ray might also occasionally show a clear peripheral zone present around the tumour which is called Huer’ sign [3]. X ray chest is not generally adequate to make the diagnosis. A CT scan of the chest gives further information with regards to the size, extension and character of the mass and is almost always required following a suspicion of mediastinal tumour. Mediastinal lipoma on CT scan appears as homogenous mass with a tissue density consistent with fat. The differential diagnosis of mediastinal fatty tumours includes lipoma, liposarcoma, thymolipoma, and herniated peritoneal fat (hiatus or diaphragmatic hernia) [1]. Lipoma is a well circumscribed and well encapsulated tumour on gross pathology. Needle biopsy might aid the diagnosis but it is often difficult to
differentiate lipoma from liposarcoma. The two most common appearances of lipoma are a well defined fatty mass and circumscribed soft tissue lesions embedded within large masses of fatty tissues. Variable proportions of mature adipocytes within lobules and immature peripherally situated lipoblasts, fibrous septa and myxoid tissues are consistent findings on histology [2]. Even if, as above, findings are very suggestive of lipoma, the definitive diagnosis is established at surgery, which is curative [4]. Surgery is only required in symptomatic cases. In our patient, the lipoma was asymptomatic, therefore it was left alone. Although the lesion is considered as biologically benign, it can grow locally to an impressive proportion and lead to a significant mass effect. Death may result if expedient surgical removal is not undertaken. Under these circumstances, complete surgical excision is the treatment of choice [3]. Local recurrences are reported in 14% to 25% of the lipoblastoma and lipoblastomatosis cases and these have been attributed to an incomplete excision [2].

**Differential Diagnosis List:** Asymptomatic mediastinal lipoma in an Elderly woman.

**Final Diagnosis:** Asymptomatic mediastinal lipoma in an Elderly woman.

**References:**


Figure 2

Description: Origin:
Description: Origin:
Figure 4

Description: Origin:
Figure 5

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Figure 6

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Figure 7

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