

# What is the cause of this widened mediastinum?

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A 64-year old male, with diabetes mellitus, presented to the emergency room with atypical chest pain. A chest radiograph revealed a widened mediastinum with a hazy-grey appearance alongside the ascending aorta and right cardiophrenic area, through which the bronchovascular structures can be visualised. These features are consistent with mediastinal lipomatosis. Mediastinal widening is considered present when the mediastinal width exceeds 8 cm measured at the aortic arch. Other causes of mediastinal widening (Table 1) have specific radiological features. A CT scan showed excessive mediastinal tissue with Hounsfield units of -50 to -100, consistent with adipose tissue. Mediastinal lipomatosis is a benign condition

**Table 1. Causes of mediastinal widening**

|                                       |                             |
|---------------------------------------|-----------------------------|
| (Traumatic) Aortic dissection         | Mediastinal lymphadenopathy |
| Vascular anomalies                    | Enlarged pulmonary arteries |
| Unfolded Aorta                        | Mediastinal masses          |
| Double superior vena cava             | Thymus                      |
| Aberrant right subclavian artery      | Diaphragmatic hernia        |
| Azygos continuation of the IVC        | Technical factors           |
| Lung                                  | Rotation                    |
| Atelectasis/Lung collapse             | Poor inspiration            |
| Pulmonary masses abutting mediastinum | Supine position             |
| Mediastinal Lipomatosis               |                             |

characterised by the presence of excessive fat deposition in the mediastinum, and should be considered when the above radiological

features are encountered with obesity, steroid use, alcoholism, Cushing’s syndrome and diabetes mellitus.

