The examination of the thoracic aorta is essential for routine perioperative examination with transesophageal echo (TEE), particularly for diagnosis of aortic diseases such as aortic atheroma, aneurysm, dissection and rupture.

Aortic atheroma:
Dislodgement of aortic atheroma has been identified as the leading cause of stroke following cardiac surgery. The ability to detect atheroma within the thoracic aorta and alter the surgical approach is an important part of most strategies for stroke prevention (1). There is evidence that mobile atheroma detected in the descending thoracic aorta is predictive of postoperative stroke (2).

Aortic aneurysms and dissections:
An aneurysm is dilatation of the aorta to 50% or more above normal size. Dissection is said to occur when the media of the aorta has been split and contains extraluminal blood within a false lumen. TEE is becoming the standard modality for the acute evaluation of a suspected acute aortic dissection (3).

Aortic rupture:
Aortic rupture is usually associated with deceleration injury. On TEE, an intimal flap may be seen and aorta is usually surrounded by hematoma and a false aneurysm may be seen.