Intramural hematoma of the thoracic aorta has emerged as a diagnosis of exclusion in recent years. Significant overlap with acute aortic dissection exists despite the increased sensitivity of preoperative CT-scan, transesophageal echocardiography (TEE) or magnetic resonance imaging. Surgical treatment has been recommended when the ascending aorta is involved. This 74-year-old patient was admitted with acute chest pain and chest X-ray showed an enlarged mediastinum. CT scan and TEE demonstrated a large intramural hematoma of the ascending aorta but did not show any intimal flap (Fig. 1). However, an acute dissection limited to the ascending aorta was found intraoperatively with the intimal tear located above the left coronary ostium (Figs. 2 and 3). Supracoronary graft replacement of the ascending aorta was performed immediately, using deep hypothermic cardiopulmonary bypass and a brief period of circulatory arrest for the confection of the distal anastomosis. The patient recovered well and was discharged 2 weeks following surgery.
Fig. 2. Intraoperative view of the ascending aorta after sternotomy.

Fig. 3. Intimal tear located above the left coronary ostium (arrowhead) and typical finding of a thrombosed false channel (small arrow: intima-media layers, large arrow: aortic adventitia).