We report the case of a 72-year-old woman referred for evaluation of a chest and back pain in whom we documented the dramatic progression from intramural hematoma to dissection of the ascending aorta with cardiac tamponade.

A 72-year-old hypertensive woman was referred to our department with a suspected diagnosis of intramural hematoma (IMH) of the ascending aorta after presenting to the emergency room because of chest and back pain. Upon admission to the intensive care unit the patient was hypertensive (blood pressure 210/120 mm Hg), her heart rate was 76 bpm; she was, thus, started on i.v. morphine for pain relief and i.v. labetalol and sodium nitroprusside for blood pressure control while under continuous monitoring. A transesophageal echocardiography (TEE) was immediately
performed to confirm the diagnosis. TEE showed an IMH of the ascending aorta associated with a mild pericardial effusion (Figure 1A) that instantaneously progressed into aortic dissection with massive pericardial effusion (Figure 1B and C) and finally cardiac tamponade (Figure 1D). According to the TEE timer, the whole sequence from IMH to tamponade occurred in less than 4 s. Unfortunately the patient died despite prompt pericardiocentesis and resuscitation before emergency surgery could be performed.

Aortic IMH was first suggested to represent a precursor of classic dissection by Zotz et al.; currently it is recognized that IMH may lead to acute aortic dissection in 28–47 % of patients. Involvement of the ascending aorta is usually considered indication for expeditious surgery given the associated risk of rupture, tamponade or compression of the coronary ostia.

Conflict of interest: none declared.

References