

Suprasternal echocardiogram: an essential tool in emergency room

Ecocardiograma supraesternal: uma ferramenta essencial na sala de emergência

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A 72-year-old man with arterial hypertension on medication presented to the emergency room with a progressive worsening after 1-hour discomfort and chest pain with dorsal irradiation. Clinical examination was unremarkable. Blood pressure was 160/83 mmHg and heart rate was 85 beats/minute. An electrocardiogram showed no signs of acute myocardial ischemia. A chest X-ray showed a mediastinal enlargement (panel A). Serial blood samples showed persistent mild elevation of *hs*-troponin (63 - 66 - 98 pg/ml, cut off 34.2 pg/ml) and severely elevated D-dimers (32359 - 58016 ng/ml, cut off 500 ng/ml). The patient experienced cardiopulmonary arrest with pulseless electrical activity and advanced life support was initiated. Transthoracic echocardiogram showed non-dilated left or right chambers with residual cardiac contractility and a mild circumferential pericardial effusion (maximum dimension 6 mm). Suprasternal view showed a flap on the ascending aorta, suggesting

an aortic dissection (panel B). A pericardiocentesis was successfully performed with pulse recuperation. Thoracic computed tomography angiography confirmed an extensive aortic dissection from the aortic root, involving the thoracic and abdominal aorta (panels C-D). The patient had another cardiopulmonary arrest and resuscitation was unsuccessful.

Authors contributions

Managed the case and manuscript redaction: Almeida I, Santos H, Miranda H; Managed the case and manuscript redaction: Santos M; Managed the case and critical revision of the manuscript: Sousa C.

Conflict of interest

The authors have declared that they have no conflict of interest.

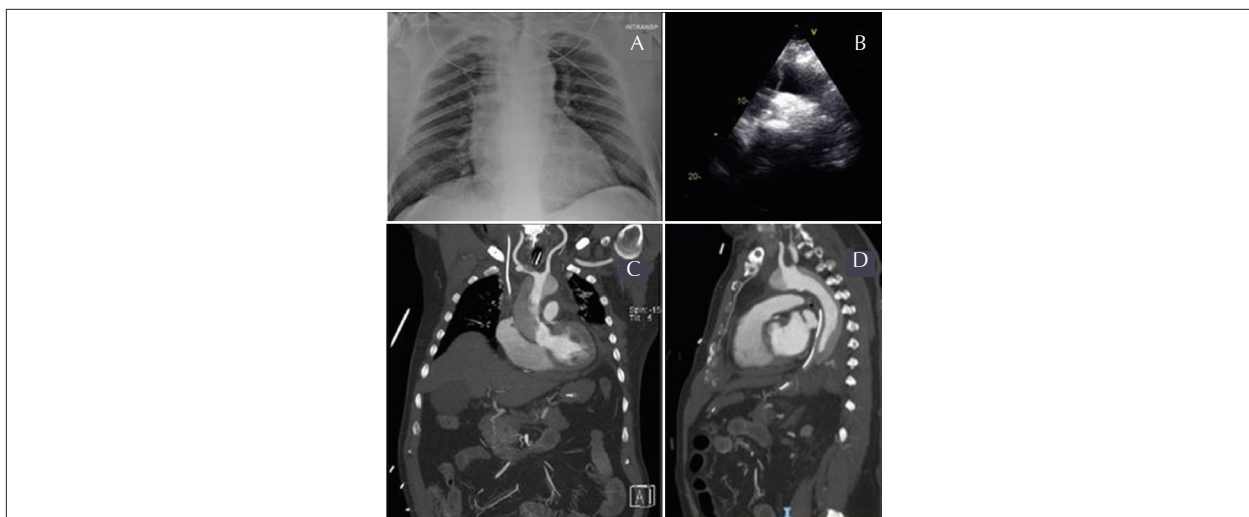


Figure 1 – A - Chest x-ray with mediastinal enlargement. B - Suprasternal echocardiographic view with flap in the ascending aorta. C: Frontal plane of thoracic tomography with aortic dissection since the aortic root and no involvement of supra-aortic branches. D: Sagittal plane of thoracic tomography with extensive aortic dissection since the aortic root and extending to the thoracic and abdominal aorta.

Keywords

Echocardiography; Chest Pain; Emergency room.

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Article received 10/23/2019; revised 12/3/2019; accepted 1/20/2020

DOI: 10.5935/2318-8219.20200026