

Intermittent vertebral flow in asymptomatic progression of aortic dissection

Evidenza di flusso intermittente nelle arterie vertebrali in un caso di progressione asintomatica di dissezione aortica

Michele Correale, Deodata Montrone, Luigi Di Martino, Matteo Di Biase, Natale Daniele Brunetti

Department of Cardiology, University of Foggia, Italy.

Corresponding author: Michele Correale; Department of Cardiology, "Ospedali Riuniti" OO.RR, Viale L. Pinto 1, I-71100 Foggia, Italy; Tel. 0881733652, Fax +390881745424, E-mail address: opsfc@tin.it

An asymptomatic 51-years-old man, with history of hypertension and dyslipidemia, five years ago subjected to Bentall operation for DeBakey type I aortic dissection, was admitted to our department for follow-up.

Carotid Doppler study showed an asymptomatic extent of dissection (Fig. 1A) but especially intermittent flow of both vertebral arteries (Fig. 1B).

Chest and abdominal CT showed signs of previous surgery, extent of the dissection to the supra-aortic vessels (Fig. 1C), presence of dissection of the

descending aorta (Fig. 1D), left common iliac artery, left external iliac artery, right common carotid artery and anonymous artery.

The presence of intermittent vertebral flow can be associated to vertebro-basilar insufficiency (VBI) that is a hemodynamic posterior circulation transient ischemic attack (TIA). VBI may result from large vessel atherosclerotic disease, dissection, cervical compressive lesions, and subclavian steal phenomenon.

Conflict of interest: None to disclose.

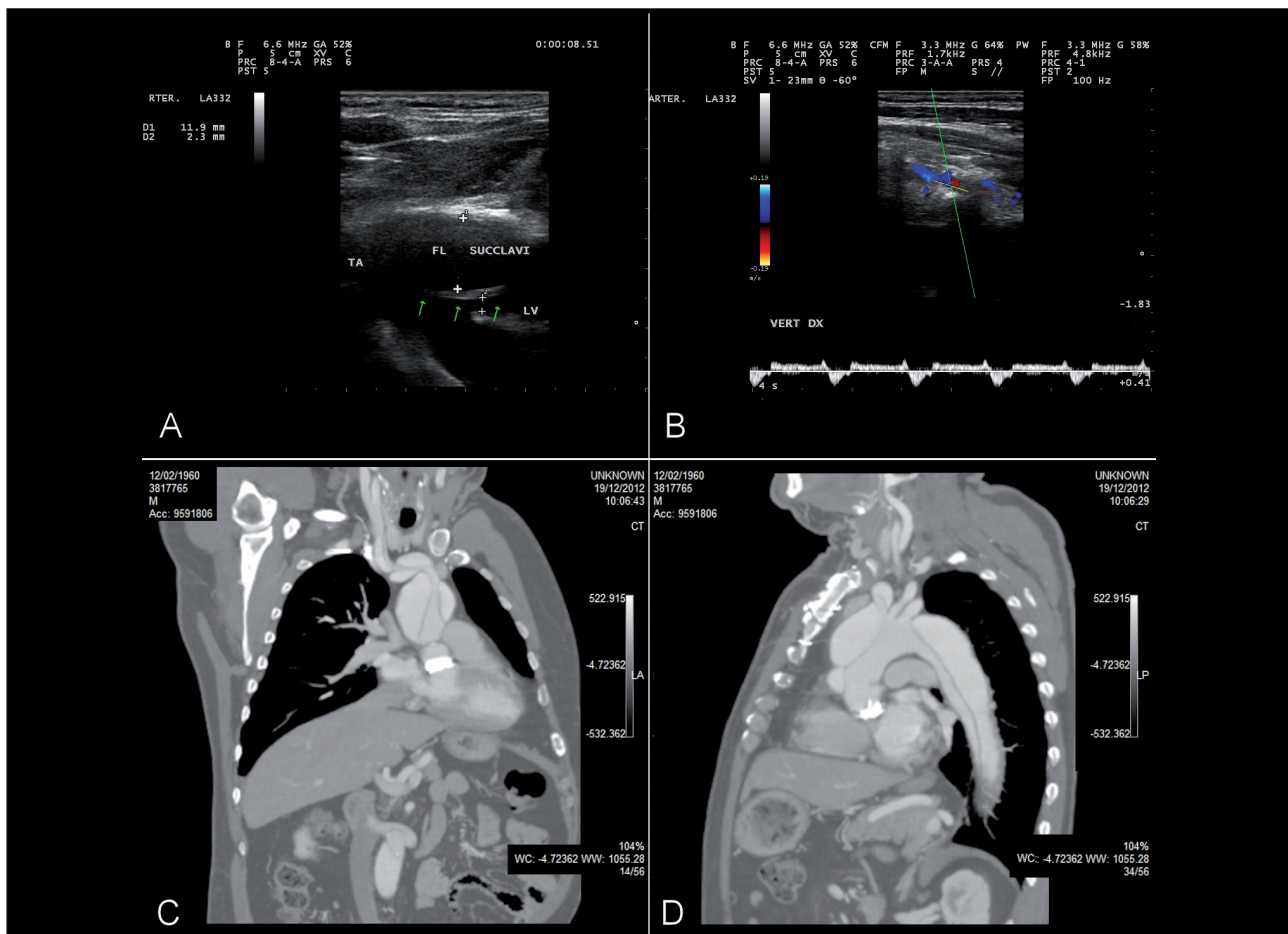


Figure 1 **A**: Ultrasound imaging of the right subclavian artery showing the dissection. FL: False lumen. LV: True lumen. Arrows: intimal flap. **B**: Doppler flow in the right vertebral artery showing an intermittent flow. **C**: CT imaging, oblique view focused to present the extent of the dissection to the supra-aortic vessels. **D**: TC Imaging, lateral view: the dissection extends towards the descending aorta.