

## Diagnosis of complicated type B aortic dissection (IIIb retrograde) by transthoracic echocardiography

### *Diagnóstico de disección aórtica tipo B (IIIb retrógrada) complicada mediante ecocardiografía transtorácica*

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*Este artículo también está disponible en español*

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A 65-year-old black patient with a history of hypertension came to the emergency room due to very intense chest pain, mostly marked at the level of the interscapular space and accompanied by breathlessness, sweating and coldness. The transthoracic echocardiogram from the parasternal view (performed several days later) showed the existence of pleural effusion and a moving linear image within the descending thoracic aorta (**Figure 1A**). From the parasternal short axis, standard and modified (intermediate) projections it was possible to visualize the apical extension of the flap from the proximal descending thoracic aorta up to the proximal portion of the abdominal aorta (**Figure 1B**). Clear visualization of both

lumens with no flow in the false lumen, the entrance at the level of the abdominal aorta with very little effective retrograde flow (**Figure 1C y 1D**), the thrombosis of the false lumen (**Figure 2A**), the marked irregularity of the intimal flap (penetrating ulcer?) (**Figure 2B** - arrow), and the branches outlet of the abdominal aorta from the true lumen were also demonstrated (**Figure 2C** - arrow). The transducer was placed in the interscapular space and continuity of the pleural effusion with the thoracic aorta and the presence of peri-aortic hematoma were visualized (**Figure 2D**). From the suprasternal projections the ascending aorta, the arch and the proximal portion of the normal sized thoracic aorta without intimal-medial flap were observed. The aortic root had normal dimensions and there was mild aortic insufficiency. It is noteworthy, in this case, the complete collection of all elements of interest only from the images obtained from transthoracic projections. The patient improved with medical treatment, with no progression of the dissection, and remains on outpatient follow-up.

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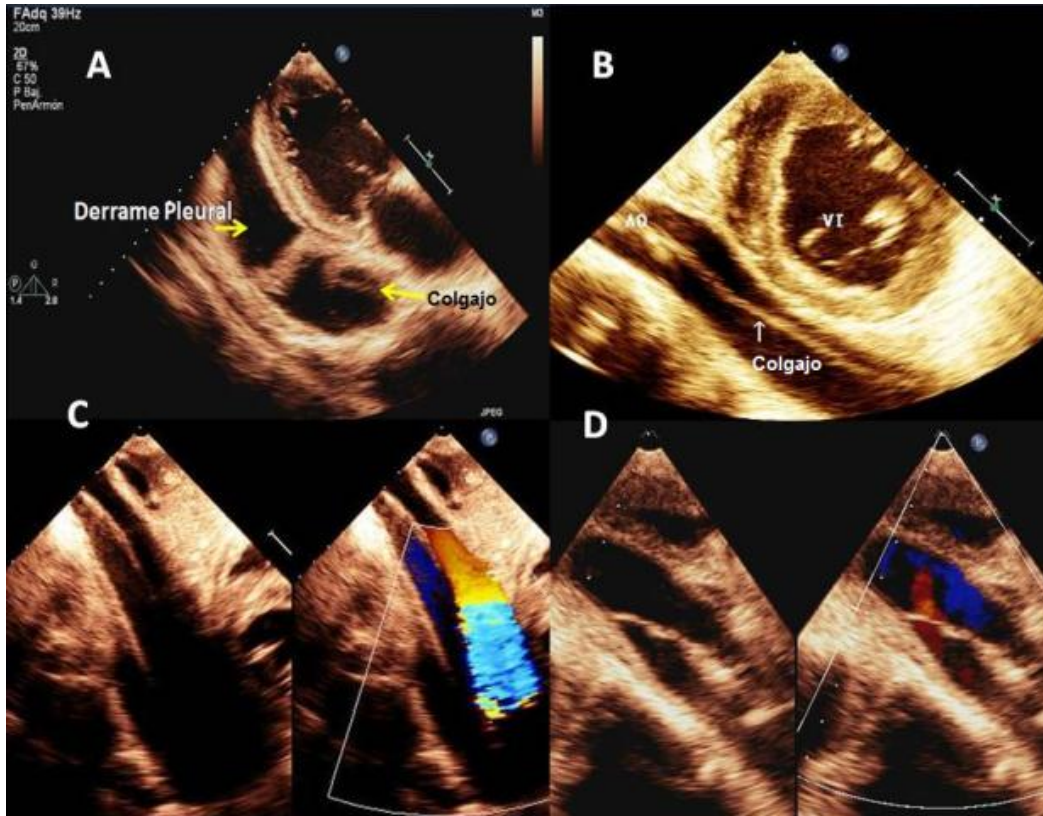


Figure 1

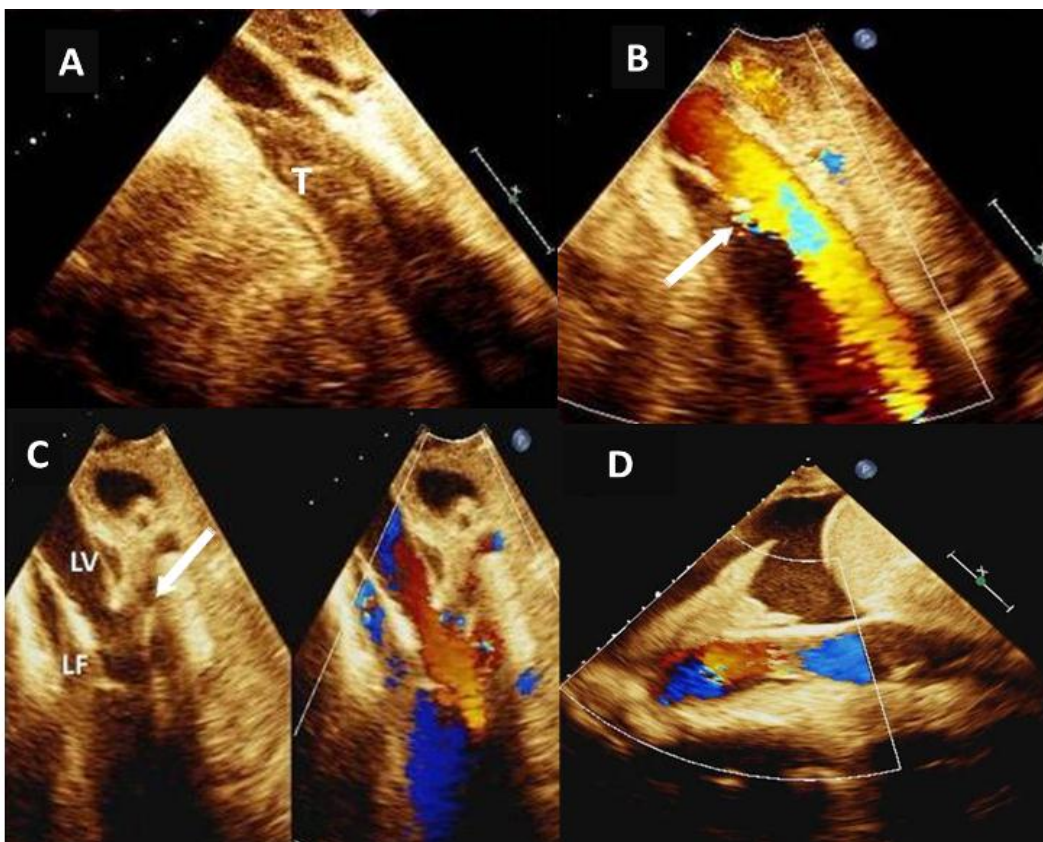


Figure 2