

In conclusion, we should like to highlight that, in patients with instability when trying to remain standing, we should suspect that orthostatic tremor may be involved, and an innocuous electromyographic study may lead us to confirm or rule out this diagnosis.

References

1. Heilman KM. Orthostatic tremor. *Arch Neurol.* 1984;41:880-1.
2. Deuschl G, Bain P, Brin M, and an Ad Hoc Scientific Committee. Consensus Statement of the movement disorder society on tremor. *Mov Disord.* 1998;13:2-23.
3. Gerschlag W, Münchau A, Katzenschlager R, Brown P, Rothwell JC, Quinn N, et al. Natural history and syndromic associations of orthostatic tremor: a review of 41 patients. *Mov Disord.* 2004;19:788-95.
4. Flobonurak P, Yu QP, Pullman SL. Clinical and Neurophysiologic Spectrum of Orthostatic Tremor: Case Series of 26 Subjects. *Mov Disord.* 2005;20:1455-61.
5. Benito-León J, Rodríguez J, Ortí-Pareja M, Ayuso-Peralta L, Jiménez-Jiménez FJ, Molina JA. Symptomatic orthostatic tremor in pontine lesions. *Neurology.* 1997;49:1439-41.
6. Spiegel J, Fuss G, Krick C, Dillmann U. Impact of different stimulation types on orthostatic tremor. *Clin Neurophysiol.* 2004;115:569-75.
7. Guridi J, Rodríguez-Oroz Maria C, Arbizu J, Alegre M, Prieto E, Landeche I, et al. Successful Thalamic Deep Brain Stimulations for Orthostatic Tremor. *Mov Disord.* 2008;23(13):1808-11.

S. Yagüe*, M. Veciana, J. Pedro, J. Campdelacreu

Servicio de Neurología, Hospital Universitario de Bellvitge Príncipes de España, Hospitalet de Llobregat, Barcelona, Spain

*Corresponding author.

E-mail: syj180574@telefonica.net (S. Yagüe).

Infectious endocarditis, cerebral haemorrhage and liver cirrhosis

Endocarditis infecciosa, hemorragia cerebral y cirrosis hepática

Sr,

We present the case of a 77-year old female with diabetes, hypertension and chronic hepatitis C virus-related liver disease who consulted at the Emergency Room for fever over the previous two days with subsequent appearance of confusion and a 39.2°C fever. The computed tomography scan of the brain revealed the presence of multiple haemorrhagic areas (sub-arachnoid, supra- and infra-tentorial regions) (fig. 1A). Given the rapid progression of the patient to septic shock, she was admitted to the Intensive Care Unit. The trans-thoracic and, in particular, the trans-oesophageal echocardiogram revealed the existence of a large, mobile growth on the aortic valve, measuring 15 x 15 x 18 mm (fig. 1B [arrow]); in addition, she presented a perforation of the aortic valve and aortic valve failure, as well as an abscess surrounding the valve (fig. 1C [arrowhead]). Three blood cultures and the culture of the cerebrospinal fluid were positive for *Staphylococcus aureus*. The patient presented multi-organ failure and, despite intensive management, passed away 48 hours later.

The autopsy confirmed the existence of aortic endocarditis complicated by a perforation of the valve, sub-valvular myocardial abscess, and multi-systemic septic embolism: there were myocardial microabscesses and purulent, bilateral, sub-arachnoid, parenchymatous haemorrhage (in the encephalon, cerebellum, and brain stem), encephalic and renal microabscesses, and multi-lobular haemorrhagic pneumonia; cirrhosis of the liver was seen.

The pathogenesis of infectious endocarditis (IE) has changed in the last few decades, often affecting patients without any cause or any of the classical predisposing cardiopathies,¹ and with an increase in the number of cases due to more virulent micro-organisms such as *Staphylococcus aureus*. These often give rise to severe infection with valve destruction and are highly emboligenic, leading to the dissemination of the infection, multiple organ failure and death. In contrast, chronic liver disease, cirrhosis in particular, significantly increases susceptibility to bacterial infections and their related mortality; however, the association of IE and cirrhosis is uncommon and rarely reported.²⁻⁵

Neurological complications appear in between 20% and 40% of cases of IE, sometimes being the first manifestation of the illness. Of all these, brain haemorrhage is unusual (3% to 5% of all cases of IE), although it involves the highest mortality (80-90% of cases);^{6,7} rupture of mycotic aneurysms, septic cerebral vasculitis, and ischaemic infarction causing bleeding tend to be the mechanisms involved in their appearance.

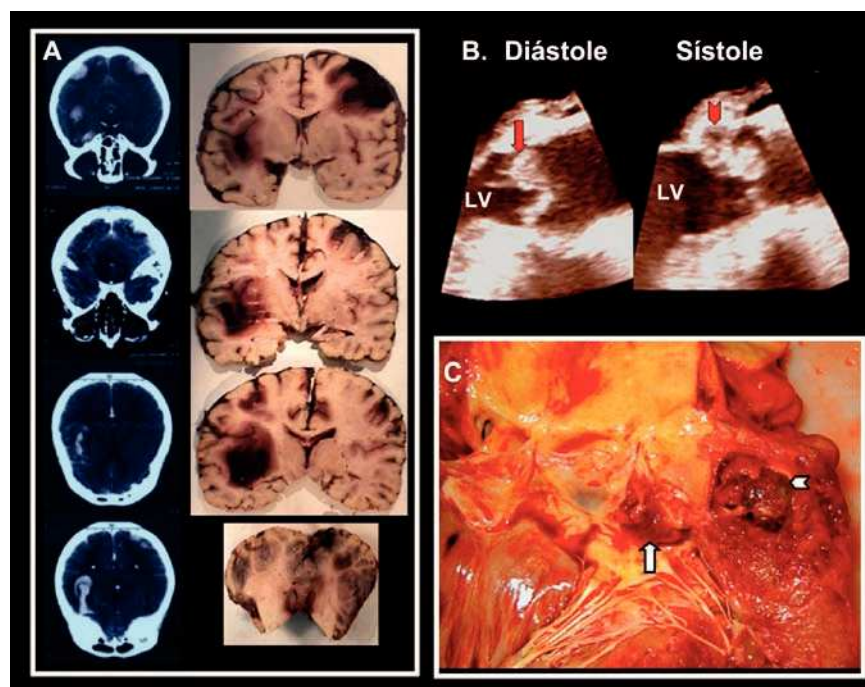


Figure 1 A: Computed tomography and microscopic encephalic slices revealing multiple haemorrhagic areas (supra- and infra-tentorial regions). B: Large growth on the left coronary aortic sigmoid (arrow), complicated by the presence of perivalvular abscess (arrowhead) and valvular perforation. Trans-oesophageal echocardiogram: the longitudinal image of the aortic root at the level of the valvular plane reveals the aortic growth protruding into the outflow tract of the left ventricle in diastole. C: Necroscopic image: longitudinal opening of the aortic root at the level of the valvular plane showing these same findings.

References

- Braun S. Current Challenges in Infective Endocarditis. *Rev Esp Cardiol.* 2003;56(6):543-5.
- McCashland TM, Sorell MF, Zetterman RK. Bacterial endocarditis in patients with chronic liver disease. *Am J Gastroenterol.* 1994;89(6):924-7.
- Hsu RB, Chen RJ, Chu SH. Infective endocarditis in patients with liver cirrhosis. *J Formos Med Assoc.* 2004;103(5):355-8.
- Otones J, Fernández-Clúa MA, Castrillo JM. Endocarditis infecciosa en pacientes con cirrosis hepática. *Med Clin (Barc).* 1989;93:561-4.
- Pérez de Isla L, Zamorano JL, Almería C, Rodrigo JL, Piedra I, Aubele A, et al. Endocarditis infecciosa en pacientes con hepatopatía crónica: valoración clínica y pronóstica. *Rev Esp Cardiol.* 2003;56(8):794-800.
- Varona JF. Neurological manifestations as presentation of infectious endocarditis. *An Med Interna.* 2007;24(9):439-41.
- Villasenín JM, Salas R, Rosell F, Arboix A. Hemorragia cerebral lobular por endocarditis infecciosa con absceso de la raíz aórtica por *Streptococcus viridans*. *Neurología.* 2007;22(7):488-9.

D.I. Gentile Lorente^{a,*}, J.M. Jaén Martínez^b

^a *Servicio de Cardiología, Hospital de Tortosa "Verge de la Cinta", IISPV, Tortosa, Tarragona, Spain*

^b *Servicio de Patología, Hospital de Tortosa "Verge de la Cinta", IISPV, Tortosa, Tarragona, Spain*

*Corresponding author.

E-mail: dgentille.ebre.ics@gencat.cat (D.I. Gentile Lorente).

Aphasia secondary to left cerebellar infarction

Afasia secundaria a infarto cerebeloso izquierdo

Sr,

The cerebellum is currently considered to modulate several different cognitive processes, including language.¹ Several cases of severe dysarthria grave,

agrammatism or mutism secondary to acute cerebellar injuries. Aphasia secondary to cerebellar injuries has been known as crossed cerebral-cerebellar diaschisis, because it has been attributed to the influence exerted by the right cerebellum on the contralateral prefrontal cortical areas by means of the cerebello-pontine thalamo-cortical pathways.²⁻⁴ However, there are scant references to language disorders owing to injuries of the left cerebellar hemisphere.⁵

In the present article, we report the case of a patient who presented acute aphasia after suffering a left cerebellar infarction, and who developed cognitive