Brain abscess and hereditary hemorrhagic telangiectasia

Abscesso cerebral e telangiectasia hemorrágica hereditária

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A 58-year-old woman presented speech impairment, mental confusion, and left hemiparesis after being found unconscious. Brain magnetic resonance imaging (MRI) showed pyogenic abscess and multiple vascular malformations in the cerebral hemispheres (Figures 1 and 2), resulting

in suspicion of Rendu-Osler-Weber disease, i.e., hereditary hemorrhagic telangiectasia (HHT). Chest computed tomography (CT) revealed pulmonary arteriovenous malformation. Ectoscopy detected multiple telangiectasia in the lips,

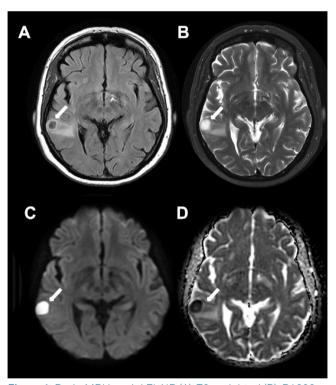


Figure 1. Brain MRI in axial FLAIR (A), T2-weighted (B), B1000 diffusion (C), and ADC map (D). A pyogenic abscess surrounded by vasogenic edema (arrows) in the right superior temporal gyrus is detected.

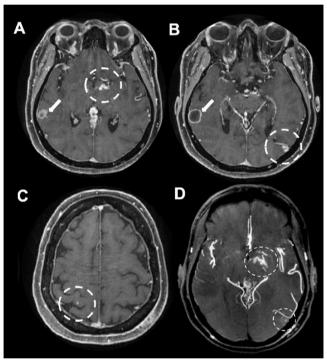


Figure 2. Brain MRI in axial, post-gadolinium volumetric T1 (A to C) and MIP (D) sequences. A pyogenic abscess surrounded by vasogenic edema (arrows) in the right superior temporal gyrus is detected (arrows in A and B). Dashed circles of images A to D highlight multiple tiny vascular malformations in both cerebral hemispheres (capillary malformations and microMAVs), more conspicuous in the MIP sequence.

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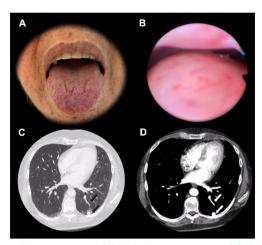


Figure 3. Face ectoscopy (A) and rhinoscopy exam (B); CT of the chest in the lung (C) and soft tissue (D) windows. Other systemic changes in the spectrum of the syndrome: multiple tiny cutaneous telangiectasia on the face, tongue, and labial mucosa (A), as well as on the nasal mucosa (B) and pulmonary vascular malformation compatible with arteriovenous malformation (AVM) (arrows on C and D).

tongue, face, and nasosinusal mucosa (Figure 3). HHT is a rare systemic fibrovascular dysplasia (prevalence rate: 1:50000–100000)¹, and brain abscess is an acute and easily forgotten complication that occurs in 1% of patients with considerable mortality, i.e., death rate of 40%².

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