

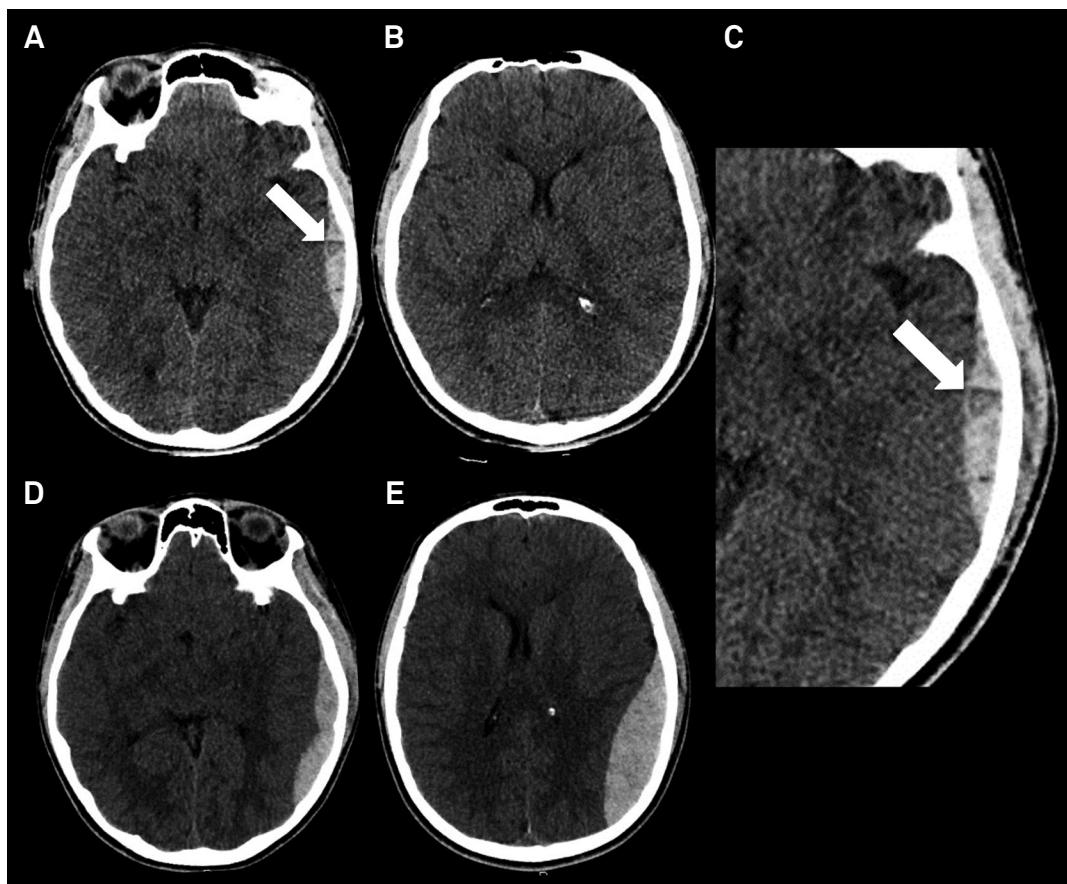
# Swirl sign in epidural hematoma

Sinal do redemoinho no hematoma epidural

Marcos Rosa Júnior<sup>1</sup>, Larissa Aguiar Martins<sup>2</sup>, Laíza Alcure Dias Scussulin<sup>3</sup>

A 32-year-old male was admitted to the emergency room due to traumatic brain injury. The computed tomography (CT), three hours after the trauma, showed an epidural hematoma with the swirl signal. After 24 hours the patient evolved with worsening of the condition and the CT was repeated (Figure).

The swirl signal is described as an area of low attenuation within an hyperattenuating hematoma<sup>1</sup>. Recent studies indicate that the swirl signal is a direct sign of hematoma expansion, associated with high morbidity and mortality rates<sup>1</sup>. Unlike the spot sign, another predictor of epidural hematoma expansion<sup>2-5</sup>, the swirl signal does not require the use of contrast.



**Figure.** (A, B and C) Non-contrast CT shows an epidural hematoma (arrow in A) with the swirl signal (arrow in C). After 24 hours, a new non-contrast CT showed an evident hematoma expansion (D and E).

<sup>1</sup>Universidade Federal do Espírito Santo, Empresa Brasileira de Serviços Hospitalares, Hospital Universitário Cassiano Antônio de Moraes, Departamento de Neuroradiologia, Vitória ES, Brasil;

<sup>2</sup>Universidade Federal do Espírito Santo, Empresa Brasileira de Serviços Hospitalares, Hospital Universitário Cassiano Antônio de Moraes, Departamento de Radiologia, Vitória ES, Brasil;

<sup>3</sup>Hospital Estadual Jayme Santos Neves, Departamento de Radiologia, Serra ES, Brasil.

Marcos Rosa Júnior <https://orcid.org/0000-0001-8668-2804>

**Correspondence:** Marcos Rosa Júnior; Departamento de Neuroradiologia da UFES, Centro de Ciências da Saúde; Avenida Marechal Campos, 1355 - Maruípe; 29043-900 Vitória ES, Brasil. E-mail: marcosrosajr@hotmail.com

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