



IMAGES IN INTENSIVE MEDICINE

Contrast media extravasation mimicking subarachnoid hemorrhage due to hypertensive encephalopathy

Extravasación de agente de contraste que simula una hemorragia subaracnoidea debido a encefalopatía hipertensiva

Gökhan Tonkaz*, Merve Nur Taşdemir, Mehmet Tonkaz

Department of Radiology, Faculty of Medicine, Giresun University, Giresun, Turkey

Available online 16 April 2025

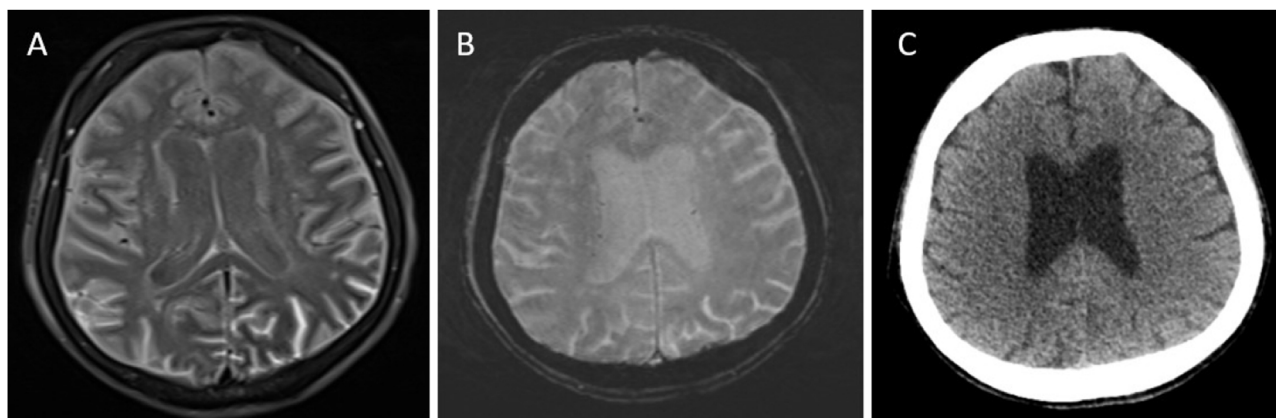


Figure 1

A 65-year-old female monitored in the ICU for severe hypertension (225/120 mmHg) developed sulcal hyperintensities on FLAIR on day one after contrast-enhanced MRI, raising suspicion of subarachnoid hemorrhage (SAH) (Fig. 1A). However, SWI and CT showed no hemorrhage (Fig. 1B and C). The findings were attributed to gadolinium leakage, confirmed by normalization on follow-up imaging. Recognizing this prevents misdiagnosis and unnecessary interventions. This case highlights that conditions leading to blood-brain barrier disruption may allow gadolinium to leak into the subarachnoid space, which may mimic SAH on FLAIR sequences obtained after contrast-enhanced MRI. In such cases, the use of additional imaging modalities, such as CT and SWI, is crucial to avoid misdiagnosis and unnecessary interventions.

DOI of original article: <https://doi.org/10.1016/j.medin.2025.502208>

* Corresponding author.

E-mail address: gokhantonkaz@gmail.com (G. Tonkaz).

<https://doi.org/10.1016/j.medicine.2025.502208>

2173-5727/© 2025 Elsevier España, S.L.U. and SEMICYUC. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

Ethical approval

The Local Ethics Committee approval was obtained.

Funding

The authors received no financial support for the research and/or authorship of this article.

Declaration of competing interest

The authors declare that they have no conflict of interest to the publication of this article.

This study has not been duplicate publication or submission elsewhere.