

Hyperintense perilesional edema in brain masses on T1-weighted images (T1WI) is an unusual radiological finding.

Three cases show this particular type of edema, one representing cerebral hemorrhagic cavernous malformation (CCM, cavernoma) and the other two, metastases of [melanoma](#). The association between this sign and cavernoma was recently recognized. On the other hand, in melanotic lesions, the relationship with T1WI-hyperintense perilesional edema has not yet been described. Despite being an infrequent sign, it can considerably narrow the differential diagnosis, which gives it a high value for clinical practice. Moreover, given the high prevalence of the entities that manifest this imaging feature, it can be occasionally noticed ¹⁾.

The use of 18F-DOPA PET/CT with magnetic resonance imaging fusion and the use of visual methods and quantitative analysis helps to differentiate between changes post-radiosurgery vs. suspicion of disease progression in a patient with brain metastases from melanoma, thus facilitating taking early surgical action ²⁾.

¹⁾

Sarbu N, Pujol T, Oleaga L. Hyperintense perilesional edema in the brain on T1-weighted images: Cavernous malformation or metastatic melanoma? Three case reports and literature review. *Neuroradiol J.* 2016 Feb;29(1):52-6. doi: 10.1177/1971400915626430. Epub 2016 Feb 2. PubMed PMID: 26838172.

²⁾

Hernández Pinzón J, Mena D, Aguilar M, Biafore F, Recondo G, Bastianello M. Radionecrosis versus disease progression in brain metastases. Value of (18)F-DOPA PET/CT/MRI. *Rev Esp Med Nucl Imagen Mol.* 2016 Apr 21. pii: S2253-654X(16)00044-5. doi: 10.1016/j.rem.2016.03.002. [Epub ahead of print] English, Spanish. PubMed PMID: 27117985.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=melanoma_brain_metastases_diagnosis

Last update: **2024/06/07 02:56**

