Insular Cavernous Malformation Classification

Fioravanti et al. divided Insular Cavernous Malformation in 2 groups, according to a mainly pial growth pattern (exophytic group) or a subcortical one (endophytic group). Endophytic iCM was further subdivided in 3 subgroups, based on the insular gyri involved. According to this classification, each patient underwent a specific additional neuroimaging investigation and surgical evaluation.

A total of 24 patients were included. In the surgical group, trans-sylvian (TS) approach was used in 6 patients with exophytic or Zone I endophytic iCMs. The transcortical (TC) approach with awake monitoring was used in 6 cases of Zone II endophytic vascular lesions. Both TS and trans-intraparietal sulcal (TIS) approach were used for 3 cases of Zone III endophytic iCM. At follow-up, 3 patients were fully recovered from a transient speech impairment while a permanent morbidity was observed in one case.

The proposed iCM classification focuses on anatomical and functional concerns, aiming to suggest the best pre-operative work-up and the surgical evaluation [1].

1)
Fioravanti A, Elia A, Morandini A, Valtulina C, Bertuccio A. Anatomo-functional evaluation for management and surgical treatment of insular cavernous malformation: a case series. Acta Neurochir (Wien). 2022 Jan 23. doi: 10.1007/s00701-021-05089-3. Epub ahead of print. PMID: 35066681.