

O'Kelly-Marotta grading scale

In 2010, the [O'Kelly-Marotta grading scale](#) was proposed as a method of assessing the degree of angiographic filling and contrast stasis in the setting of [intracranial aneurysms](#) treated by [endovascular flow diversion](#). Taking into account the dynamic nature of the contrast stasis, it is designed for use with [cerebral angiography](#) to predict aneurysm closure over time ¹⁾.

Parameters

A digital subtraction angiogram involving arterial injection and extending completely into the venous phase is necessary for accurate grading.

Two variables are addressed, namely the degree of aneurysm filling and the timing of contrast clearance.

Aneurysm filling

A: total filling (>95%)

B: subtotal filling (5-95%)

C: entry remnant (<5%)

D: no filling (0%)

Stasis phase

1: no stasis (arterial phase clearance, before capillary phase)

2: moderate stasis (clearance before venous phase)

3: significant stasis (persistent contrast at venous phase)

Important points

ten possible scores exist (i.e. A1, A2, A3, B1, B2, B3, C1, C2, C3, and D) as the absence of filling by definition precludes the observation of different phases of stasis the OKM scale should be applied to both pre- and post-treatment cerebral angiography the scale has been shown since its inception to demonstrate a high degree of inter- and intraobserver agreement ²⁾.

¹⁾

O'Kelly CJ, Krings T, Fiorella D, Marotta TR. A novel grading scale for the angiographic assessment of intracranial aneurysms treated using flow diverting stents. Interv Neuroradiol. 2010;16:133-137.

²⁾

Joshi MD, O'Kelly CJ, Krings T, Fiorella D, Marotta TR. Observer variability of an angiographic grading

scale used for the assessment of intracranial aneurysms treated with flow-diverting stents. AJNR Am J Neuroradiol. 2013 Aug;34(8):1589-92. doi: 10.3174/ajnr.A3431. Epub 2013 Feb 28. PubMed PMID: 23449648.

From:

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

Permanent link:

https://neurosurgerywiki.com/wiki/doku.php?id=o_kelly-marotta_grading_scale

Last update: **2024/06/07 03:00**

