Claassen CT scale

A total of 57 patients were studied. Sixty percent of the patients developed sonographic vasospasm, which was significantly associated with delayed cerebral ischemia and mortality. The Claassen and Hijdra scales were better correlated with the development of cerebral vasospasm (areas under the curve of 0.78 and 0.68) than was Fisher's scale (0.62). Thirty-two patients (56.1%) developed cerebral infarction on CT; the significantly associated factors were poor clinical grade at admission ($p = 0.04$), sonographic vasospasm ($p = 0.008$) and severity of vasospasm ($p = 0.015$). Only the semiquantitative Hijdra scale was significantly correlated with the development of radiological delayed cerebral ischemia ($p = 0.009$). The patients who presented cerebral infarction had worse neurological evolution and higher mortality.

Conclusion: This is the first study in our environment on the subject. The Claassen and Hijdra tomographic scales showed better prognostic performance than the Fisher scale for the development of cerebral vasospasm. The finding of sonographic vasospasm could be a noninvasive criterion for the early detection of delayed cerebral ischemia and neurological deterioration in patients with aneurysmal subarachnoid hemorrhage [1)]

see also Woertgen C, Ullrich OW, Rothoerl RD, Brawanski A. Comparison of the Claassen and Fisher CT classification scale to predict ischemia after aneurysmatic SAH? Zentralbl Neurochir. 2003;64(3):104-8. doi: 10.1055/s-2003-41880. PMID: 12975744.

1)
Haedo MG, Grille P, Burghi G, Barbato M. Correlation between tomographic scales and vasospasm and delayed cerebral ischemia in aneurysmal subarachnoid hemorrhage. Crit Care Sci. 2023 Dec 22;35(3):311-319. doi: 10.5935/2965-2774.20230119-en. PMID: 38133161; PMCID: PMC10734814.