

Cerebrovascular complications associated to preeclampsia. Risk factors and functional outcome.

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Introduction:

Preeclampsia is a multisystemic hypertensive disease characterized by endothelial dysfunction and immunologic dysregulation¹. It affects 3-8% of all pregnancies and is involved in 36% of cerebrovascular disease (CVD) during this period².

Objective:

To describe clinical presentation of CVD in patients with preeclampsia, determine the unfavorable outcome factors and evaluate final disability.

Methods:

We included patients with preeclampsia and diagnosis of ischemic stroke (IS), intracerebral hemorrhage (ICH) or cerebral venous thrombosis (CVT) from January 1987 to June 2017 in a third care center. Descriptive statistics was used. The primary outcome was final disability by modified Rankin scale (mRs). Significance was defined as $p < 0,05$ and also expressed as odds ratios (OR) and the 95% confidence interval (CI).

Results:

We included 61 patients with a mean age of 31,1 years (SD 11). CVT was the most common clinical presentation of CVD in preeclampsia (n= 28, 46%) (Figure 1). Mean follow-up was 64 months (SD 7,5 months). No additional cardiovascular risk factor was associated for unfavorable outcome in CVD. Favorable outcome (mRs 0-2) at end of follow-up was found in 43 (69%) of patients (Figure 2).

Conclusion:

Contrary to what Anglo-Saxon literature have reported where ICH is the most common clinical presentation of CVD in preeclampsia (47%)¹, we had found more frequency of CVT and there was no risk factor with statistical significance association to unfavorable outcome. The value of our study lies in the condition of a group of patients in fertile and productive stage, and the recent finding of the perdurability of cardio-cerebrovascular risk beyond this period¹ should make us consider the need for future studies to assess the risk of recurrence.

Figure 1. Clinical presentation of CVD in preeclampsia

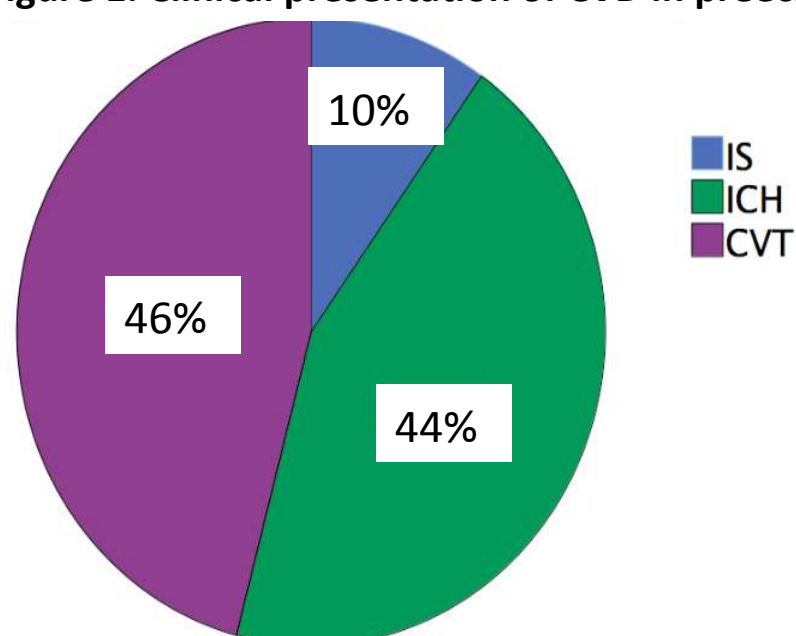
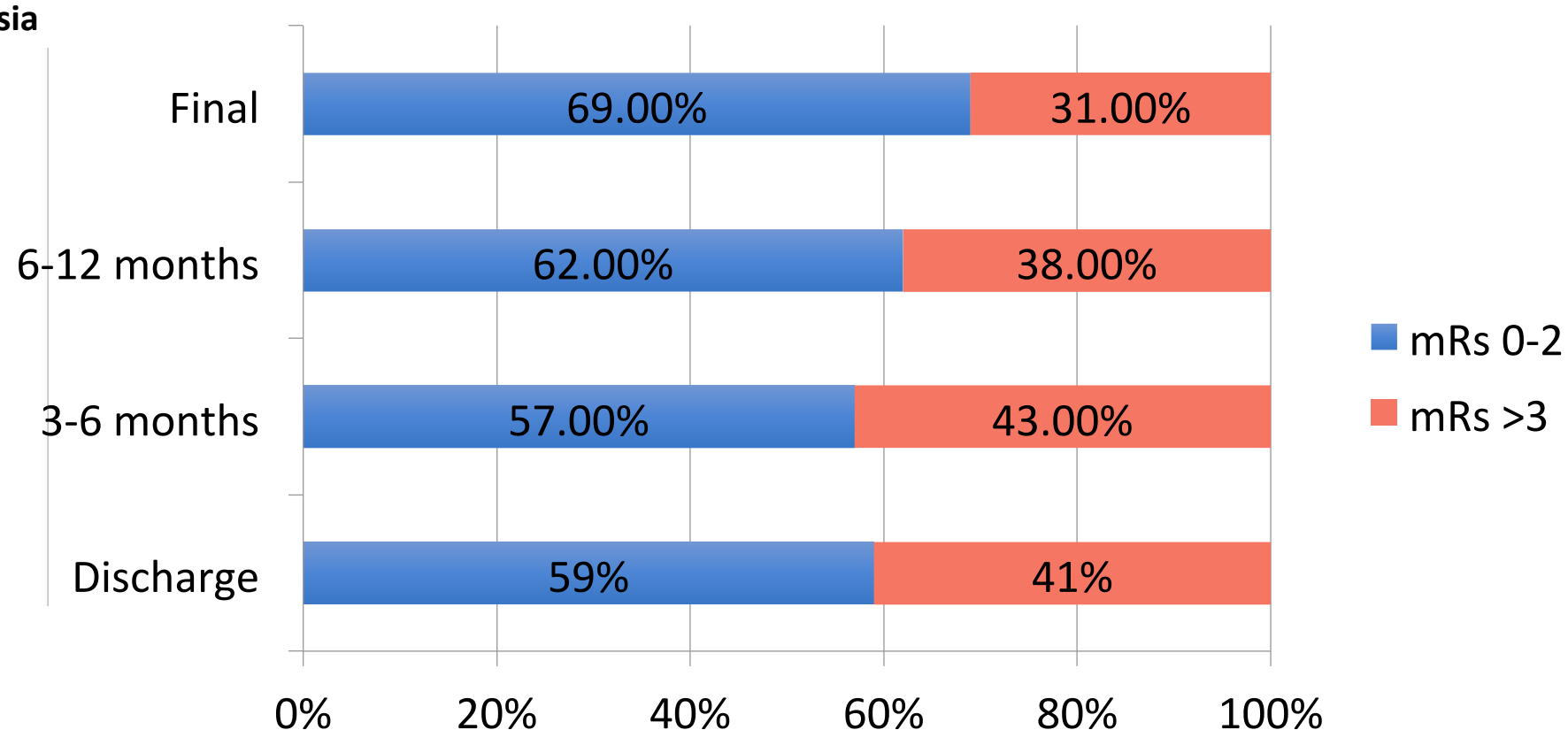


Figure 2. Functional prognosis in modified Rankin score



References:

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