Milrinone as a rescue therapy for symptomatic refractory cerebral vasospasm in aneurysmal subarachnoid hemorrhage

Romero, C. M.
Morales, D.
Reccius, A.

Mena, F.

Prieto, J.

Bustos, P.

Larrondo, J.

Castro, J.

Introduction: Delayed ischemic neurological deficit associated to cerebral vasospasm is the most common cause of sequelae and death that follows the rupture of an aneurysm. The objective of this study was to evaluate the safety and efficacy of intra-arterial Milrinone in patients with symptomatic refractory cerebral vasospasm. Patients and Method: Eight patients diagnosed with aneurysmal subarachnoid hemorrhage who developed symptomatic cerebral vasospasm refractory to conventional medical therapy were enrolled. They received an intra-arterial infusion of Milrinone at a rate of 0.25 mg/min, with a total dose of 10-15 mg. Qualitative evaluation of angiographic response, neurological and systemic complications as well as functional outcome at 3 months were documented. Results: All patients had a significant angiographic response. This was evidenced by a pre-treatment vessel stenosis greater than 70%, that improved to less than 50% after the intra-arterial Milrinone infusion. Three patien