Jai Shankar, J Neurol Neurophysiol 2012, 3:6
http://dx.doi.org/10.4172/2155-9562.S1.002

OMICS Group Conferences
Accelerating Scientific Discovery

International Conference on
Central Nervous System - Drug Effects & Novel Drug Development

September 5-7, 2012 DoubleTree by Hilton Philadelphia Center City, USA

Effect of intra-arterial milrinone therapy in patients with vasospasm from aneurysmal subarachnoid hemorrhage

Jai Shankar
QE II Hospital, Dalhousie Universtiy, Canada

Several methods have been used to treat cerebral vasospasm, which is a major cause of morbidity and mortality in patients with aneurysmal subarachnoid hemorrhage (SAH). Here, we examined the effectiveness and safety of intra-arterial injection of milrinone for the treatment of vasospasm. . Milrinone, a bipyridine methyl carbonitrile analog of amrinone, is a noncatecholamine, nonglycosidic inotropic agent with direct vasodilator action. It has little effect on heart rate or blood pressure. Milrinone was chosen as the preferred drug over other intra-arterial drugs since significant systemic and/or neurological side effects have been noted in the studies that used verapamil and papaverine for intra-arterial treatment of vasospasm.

We treated multiple consecutive patients with angiographically confirmed vasospasm received intra-arterial milrinone. The improvement in diameter of vessel (in millimeters) following treatment was assessed by paired t test for statistical significance. The angiographic improvement of supraclinoid internal carotid artery, M1 segment of middle cerebral artery, and A1 and A2 segment of anterior cerebral artery was compared with the modified Rankin score of the patients at discharge. There was significant angiographic improvement after milrinone therapy ($p < 0.0001$).

Intra-arterial milrinone was a safe and effective treatment of cerebral vasospasm following aneurysmal SAH.

Biography

Dr Jai Shankar has completed his DM in Neuroradiology from India and Fellowship in Diagnostic and Interventional Neuroradiology from University of Ottawa and University of Toronto, Canada. He is currently working as Assistant Professor of Neuroradiology in QE II Hospital, Dalhousie University, Halifax, Canada. His major interest is endovascular treatment of neurovascular diseases. He is also interested in perfusion studies and functional MRI. He has published more than 25 papers in reputed journals and serving as reviewer for multiple journals.

shivajai1@rediffmail.com