

The Oxford Protocol For The Management Of Spinal Avms

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Introduction:

Spinal AVMs are managed with interventional and when not feasible will be with operative means. The operative management is variable and various adjuncts are used. We have developed a standard protocol for the treatment of these patients.

Aim:

To assess the outcomes and improve our standard protocol.

Material And Methods:

Over 2 years (2016-2018) we operated on 12 patients, 3 F and 9 M, age ranges 19-76 Y. They presented with variable and progressive neurological features. Preoperative MRI and spinal angiograms are performed in all patients. Patients were admitted the day before the operation for preoperative neurological assessment and spinal marking with injection of methylene blue at the pathological level. All patients were operated on with pre and intraoperative neurophysiological monitoring, temporary clip application, doppler ultrasound and ICG. Patients underwent immediate postoperative spinal angiogram under the same GA with a view to have a reoperation. The operative steps will be described in more detail. The patients recovered in HDU/ITU postoperatively to maintain an acceptable blood pressure targets to achieve adequate spinal perfusion. Upon discharge the patients were followed up clinically and radiologically.

Results:

10 patients showed improvement in their neurological deficits within 6 months after surgery and 2 remained stable. 11 patients had complete resection/disconnection of the malformation. One patient had early venous refilling which is under radiological monitoring. There were no postoperative complications.

Conclusions:

The protocol that is followed ensures safe and complete resection/disconnection of the spinal malformation.