

Everything You Always Wanted To Know About Radiosurgery of AVM (But Were Afraid To Ask)

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Stereotactic radiosurgery (SRS) is an effective management option of intracranial AVM. It is particularly indicated for deep-seated or critically located lesions. Successful treatment results in obliteration of the nidus within 1-3 years (so-called "latency period") due to gradual thickening of the vessel wall. In small AVM (<2 cc) treated with appropriate doses obliteration can be attained in approximately 80-90% of cases. For management of large AVM staged-volume or staged-dose SRS, or hypofractionated radiotherapy may be applied. Combined treatment with embolization followed by SRS may result in decreased obliteration rates, but it may be irrelevant if Onyx[®] is used. In general, for Spetzler-Martin grades I-II AVM microsurgical resection is the treatment of choice, for grade III single-staged SRS may be considered, whereas for grade IV-V either staged SRS or combined treatment is reasonable. However, this scheme is very general, and determination of the optimal treatment strategy for such patients depends on the various additional parameters.