

[Home](#) > [Journal](#) > [Medicine & Healthcare](#) > [OJMN](#)[Indexing](#) [View Papers](#) [Aims & Scope](#) [Editorial Board](#) [Guideline](#) [Article Processing Charges](#)[OJMN](#) > Vol.3 No.1, January 2013

OPEN ACCESS

De Novo Cavernous Malformation after Radiosurgery

PDF (Size: 124KB) PP. 1-3 DOI: 10.4236/ojmn.2013.31001

Author(s)

Catarina Viegas, Bruno Santiago, Joana Boléo Tomé, Manuel Cunha Sá

ABSTRACT

Background: The general use of radiation therapy and radiosurgery as first-line or adjuvant treatment of central nervous system (CNS) lesions has been associated with several harmful effects. Case Description: We report the case of a 16-year-old male patient, submitted at the age of seven to surgical removal of a world health organization (WHO) grade II diffuse astrocytoma and referred for adjuvant radiosurgery after three further surgeries due to local recurrences. Seven years after radiosurgical treatment, he presented with symptoms of intracranial hypertension. Magnetic resonance imaging (MRI) at the time showed a cavernous malformation in the tumor bed, histologically confirmed, without tumoral recurrence. Conclusion: This case report emphasizes the relation between radiosurgery and the appearance of the novo cavernous malformations, only described previously in one adult patient.

KEYWORDS

Cavernous Malformation; Radiosurgery; Radiation Induced Cavernoma; Grade II Astrocytoma

Cite this paper

C. Viegas, B. Santiago, J. Tomé and M. Sá, "De Novo Cavernous Malformation after Radiosurgery," *Open Journal of Modern Neurosurgery*, Vol. 3 No. 1, 2013, pp. 1-3. doi: 10.4236/ojmn.2013.31001.

References

- [1] J. F. Martinez-Lage, I. de la Fuente, J. R. de San Pedro, J. L. Fuster, M. A. Pérez-Espejo and M. T. Herrero, "Cavernomas in Children with Brain Tumors: A Late Complication of Radiotherapy," *Neurocirugia*, Vol. 19, 1998, pp. 50-54.
- [2] A. Azevedo, D. Salgado, I. Costa, M. L. Quintal, J. M. B. Marques and P. Pereira, "Radiation Induced Cavernomas," *Sinapse*, 2006, pp. 1-6.
- [3] S. Burn, R. Gunny, K. Phillips, M. Gaze and R. Hayward, "Incidence of Cavernoma Development in Children after Radiotherapy for Brain Tumors," *Journal of Neurosurgery*, Vol. 106, No. 5, 2007, pp. 379-383.
- [4] M. Furuse, S. I. Miyatake and T. Kuroiwa, "Cavernous Malformation after Radiation Therapy for Astrocytoma in Adult Patients: Report of 2 Cases," *Acta Neurochirurgica*, Vol. 147, No. 10, 2005, pp. 1097-1101. doi:10.1007/s00701-005-0579-2
- [5] Y. Iwai, K. Yamanaka and M. Yoshimura, "Intracerebral Cavernous Malformation Induced by Radiosurgery. Case Report," *Neurologia Medico Chirurgica*, Vol. 4, No. 4, 2007, pp. 171-173. doi:10.2176/nmc.47.171
- [6] S. M. Nimjee, C. J. Powers and K. R. Bulsara, "Review of the Literature on the Novo Formation of Cavernous Malformations of the Central Nervous System after Radiation Therapy," *Neurosurgical Focus*, Vol. 21, No. 1, 2006, p. e4.
- [7] J. E. Conway and D. Rigamonti, "Cavernous Malformations: A Review and Current Controversies," *Neurosurgery Quarterly*, Vol. 16, No. 1, 2006, pp. 15-23. doi:10.1097/01.wnq.0000203021.93797.a4
- [8] P. W. Detwiler, R. W. Porter, J. M. Zabramski and R. F. Spetzler, "De Novo Formation of a Central Nervous System Cavernous Malformation: Implications for Predicting Risk of Hemorrhage. Case

[OJMN Subscription](#)[Most popular papers in OJMN](#)[About OJMN News](#)[Frequently Asked Questions](#)[Recommend to Peers](#)[Recommend to Library](#)[Contact Us](#)

Downloads: 6,382

Visits: 31,333

[Sponsors >>](#)

