9th International Conference on
Neuro-Oncology and Brain Tumor
Neuro-Oncology 2019
August 21-22, 2019 | Hong Kong

Grade 2 radiation induced meningioma: case presentation and review of literature.

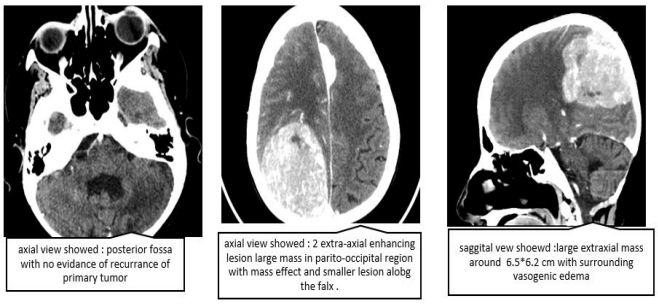
Norah Alajmi ,FarisYaghmoor, Sayed Raza Ali, Rania Al Gawahmed, Sabah Al-Rashed.
Department of Neurosurgery, Prince Sultan Military Medical City(PSMMC), Riyadh, Saudi Arabia

I. Abstract:

Cranial radiotherapy is a major modality for the treatment of cranial tumors. Irradiation carries potential risk for long-term complications including secondary brain tumors.Radiation induced neoplasm of the brain is rare. Meningiomas and high-grade gliomas are the most common secondary tumors among survivors of childhood CNS neoplasms exposed to cranial radiotherapy. comparing both, meningioma considered more common. Incidence ofgliomas seems to reach plateau eventually after long-term follow up,while radiation induced meningioma (RIM) continue occurring with unexpected latency period (time between exposure to radiation and development of secondary tumor). Furthermore, glioma tend to be more aggressive with less survivors, unlike benign course of meneingioma. Radiation induced meningioma most commonly Grad I, meningothelial meningioma is the most common subtype, thus complete resection is possible in most patients. Grade 2 RIM is of rare occurrence, compared to grade 1 it carries greater morbidity and mortality. Long term follow up must be considered, most of survivors of childhood brain tumors develops RIM in adulthood, which creates an obstacle due to the change from pediatric to adult healthcare, so importance of long term follow up must be explained to patients and their family during clinic counselling, aiming for early diagnosis and reduction of mortality and morbidity

II. Image:

Fig. B: Brain CT-scan with contrast in November 2018



III. Reference:

1. Pekic S, Popovic V, Miljic D. Hypopituitarism Following Cranial Radiotherapy. Endotext. 2018;.
2. Ghim T, Seo J, O'Brien M, Meacham L, Crocker I, Krawiecki N. Childhood intracranial meningiomas after high-dose irradiation. Cancer. 1993;71(12):4091-4095.
3. Bowers D, Moskowitz C, Chou J, Mazewski C, Neglia J, Armstrong G et al. Morbidity and Mortality Associated With Meningioma After Cranial Radiotherapy: A Report From the Childhood Cancer Survivor Study. Journal of Clinical Oncology. 2017;35(14):1570-1576.
4. Vinchon M, Leblond P, Caron S, Delestret I, Baroncini M, Coche B. Radiation-induced tumors in children irradiated for brain tumor: a longitudinal study. Child's Nervous System. 2011;27(3):445-453.
5. Yamanaka R, Hayano A, Kanayama T. Radiation-Induced Meningiomas: An Exhaustive Review of

Copyright © 2016-2018 Meetings Int PTE Ltd, All Rights Reserved.

the Literature. World Neurosurgery. 2017;97:635-644.e8.
6. Shah A, Jusue-Torres I, Kuchakulla M, Ivan M, Benveniste R, Morcos J et al. Radiation-induced meningiomas: A case-control study at single center institution. Journal of the Neurological Sciences. 2018;387:205-209.
7. Umansky F, Shoshan Y, Rosenthal G, Fraifeld S, Spektor S. Radiation-induced meningioma. Neurosurgical Focus. 2008;:E7.
8. Aboukais R, Zairi F, Le Rhun E, Lejeune J, Devos P, Reyns N. Radiation-associated grade 2 meningiomas: A nine patient-series and review of the literature. Clinical Neurology and Neurosurgery. 2015;136:10-14.
9. KOMORI T. The 2016 WHO Classification of Tumours of the Central Nervous System: The Major Points of Revision. Neurologia medico-chirurgica. 2017;57(7):301-311.
10. Diamandis P, Aldape K. World Health Organization 2016 Classification of Central Nervous System Tumors. Neurologic Clinics. 2018;36(3):439-447.
11. Brassesco M, Valera E, Neder L, Pezuk J, Oliveira R, Scrideli C et al. Cytogenetic findings in pediatric radiation-induced atypical meningioma after treatment of medulloblastoma: case report and review of the literature. Journal of Neuro-Oncology. 2012;110(3):397-402.

IV. Biography:

Dr. AlRashed, A dedicated Neurosurgeon with a demonstrated history of working in the hospital & health care. Skilled in Clinical Research, Adult, Pediatrics, Hospitals, Medicine, and Healthcare. Strong healthcare services professional with a CCT and FRCS (Neuro.Surg) focused in Neurosurgery from 25 year in Academic and Clinical Experience in United Kingdom-London. First to be honoured to introduce ROWENA Neurosurgical models to train junior residents in Kingdom of Saudia Arabia

V. Presenting author details



Full Name:Sabah AlRashed
Contact number:+966550948599
Linked In account:
https://www.linkedin.com/in/drsabahalrashed
Category: Oral presentation

Copyright © 2016-2018 Meetings Int PTE Ltd, All Rights Reserved.