"Flosealoma" - An unusual intracranial mimic in a child

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Introduction: We describe a young girl with a background of suprasellar germ cell tumour, presenting two months post-surgical resection with a recurrent lesion in the tumour track. Due to diagnostic uncertainty a redo surgery was performed to resect the lesion that revealed a foreign body granuloma. We discuss the aetio-pathogenesis and the management of this rare occurrence.

Case Description: A 7 year old girl presented with a three week history of increasing thirst, headache and complete vision loss in right eye. MRI brain revealed a suprasellar lesion. A subtotal approach was carried out for a biopsy and debulking initially and subsequently underwent an interhemispheric approach for radical excision of the lesion. Histopathology revealed a secreting germ cell tumour that needed adjuvant chemotherapy. During debulking, there was bleeding from the right pericallosal artery. Bleeding was controlled using 5mls of Floseal ® hemostatic matrix. Two months later, the patient presented with worsening endocrine symptoms. A post-operative MRI revealed a possible haematoma or recurrent tumour in the surgical tract. Due to diagnostic uncertainty, a redo craniotomy and resection of lesion on the corpus callosum was undertaken. The lesion was adherent to the pericallosal vessel and surrounding structures. The lesion was noted to be calcified and further histopathological analysis revealed a foreign body granuloma.

Discussion: Haemostatic matrix agents are thrombin-gelatin sealants used regularly in both cranial and spinal procedures. The gelatin and thrombin components are mixed together at the time of use and are activated, facilitating clotting when in contact with blood. The median time for degradation for this product is 30 days in comparison to oxidized cellulose and collagen products that have median degradation of 60 days and 90 days respectively. Complications and adverse effects due to haemostatic matrix are rare in the paediatric age group; however, these are known to occur under similar clinical scenario in adults. This complication appeared within the time frame mentioned above and it is difficult to exclude the possibility of tumour recurrence.

Conclusion: The possibility of the foreign body granuloma should be considered as a possible differential diagnosis in such circumstances along with neuroradiological input. Surgical exploration may be warranted as there is usually a diagnostic dilemma and further management depends on the final histopathology.