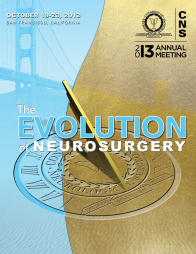


N-butyl 2-cyanoacrylate Toxicity Post Embolisation of Vertex Occipital Hemangioma

Zaitun Zakaria; Chandru Kaliaperumal Mr; John Caird



Introduction

Haemangioma composes of endothelial malformation which can be highly vascularised. Prior to surgical excision of this benign lesion, a radiological intervention by means of an embolization would be useful.

Methods

A 3-year-old boy with known vertex occipital haemangioma had 3 embolisation procedure done prior to surgical excision. Onyx was used during the first embolisation treating approximately a quarter of the mass. This followed by direct percutaneous cannulation of the scalp haemangioma over the occipital vertex where 30 ml and 50 ml of N-butyl 2-cyanoacrylate (NBCA) were used.

Results

On day one post surgical excision, he started to develop unusual movement on his upper limbs described as tremor bilaterally and quite ataxic on walking. He became irritable and complained of headache, which aggravated the tremor and he would hold his head for that. Chest X-Ray followed by CT Thorax showed diffuse interstitial changes bilaterally with multiple areas of density in the perihilar and subcarinal regions. CT Abdomen demonstrated a dense rim surrounding the kidneys bilaterally with areas of density in the renal tissue, liver and spleen. CT brain also showed similar hyperdensity in the caudate nuclei, thalamic region and cerebellar cortex. The appearances are in keeping with micro embolization to these areas as a result of previous haemangioma embolization.

Conclusions

In summary we presented an interesting case of unexpected complication of embolization using NBCA for vertex occipital haemangioma in a child. He responded to conservative treatment with dexamethasone in addition to IVIG infusion for 5 days. Clonazepam was prescribed for his agitation and tremor.

Learning Objectives

To our knowledge, this is the first such case reported in literature highlighting careful consideration of pre and post-operative investigation and dosage used especially in paediatric patients.

[DEFAULT POSTER]