

ORAL PRESENTATION

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Venous sinus injuries are common with occipital skull fractures

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Introduction

Traumatic cerebral venous sinus injuries are usually managed conservatively, however sinus thrombosis and obstruction can result in refractory intracranial hypertension.

Methods

We retrospectively analysed CT venograms performed on 29 patients who had sustained a skull fracture that crossed a venous sinus at a London Major Trauma Centre.

Results

18 of the 29 patients studied had either venous sinus thrombosis (14) or significant sinus caliber compromise

(+/- thrombosis). Three mechanisms of sinus injury were noted in this group (Figure 1). A) Displaced fracture restricting sinus caliber; B) periosteal or extradural haematoma compressing the sinus and c) reactionary sinus thrombosis to an undisplaced overlying fracture.

Conclusions

CT Venography should be considered in patients with fractures overlying a venous sinus especially in cases with refractory or disproportionate intracranial hypertension or headache out of keeping with imaging appearances. We demonstrate different types of injury and management options.

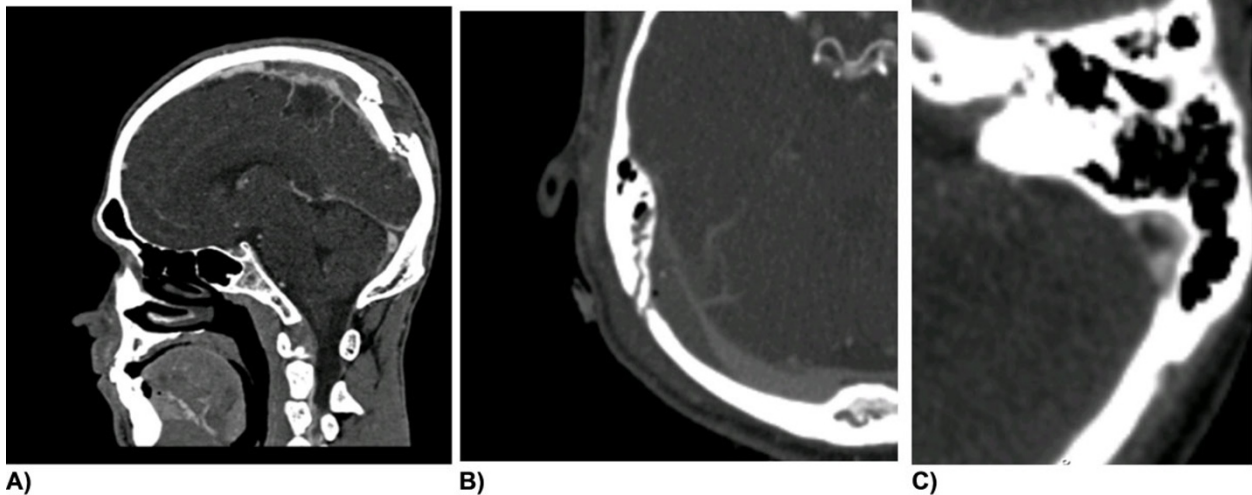


Figure 1 A) Displaced fracture causing sagittal sinus thrombosis; B) Periosteal haematoma compressing right transverse sinus; C) Right Sigmoid Sinus thrombus forming under undisplaced right occipital / base of skull fracture.

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