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Sir,

Pott's puffy tumour: a rare but sinister cause of periorbital oedema in a child

Pott's puffy tumour (PPT), first described by Percival Pott in 1760, refers to a doughy, indolent swelling over the forehead caused by an underlying subperiosteal abscess of the frontal bone. It typically affects adolescent male subjects with frontal sinusitis and presents to ENT or neurosurgeons. However, we describe an unusual case occurring in a 7-year-old child and presenting with periorbital oedema.

Case report

A 7-year-old Caucasian boy presented to A&E with a 3-day history of non-erythematous, non-tender, tense swelling of his left upper lid, completely occluding the eye and extending above the brow. This was associated with mild headaches, vomiting, and intermittent pyrexia, which his mother attributed to a recent cold. Right eye examination was unremarkable. Blood tests revealed a CRP = 245, a raised white cell count and a mild hyponatraemia. An unenhanced orbital/sinus CT confirmed ethmoido-maxillary sinusitis but no postseptal orbital involvement. The patient was admitted and treated with 48 h of intravenous benzylpenicillin and flucloxacillin, followed by discharge on oral antibiotics. Ophthalmic review 1 week later found him systemically improved but with his left lid unchanged. An MRI head again confirmed no orbital pathology. However, a large subperiosteal abscess was now identified in the frontal bone, underlying the brow swelling, as well as an intracranial extradural abscess. The patient was immediately transferred for neurosurgical decompression, which, together with paranasal sinus drainage and intravenous clindamycin, enabled him to make a full recovery.

Comment

PPT is thought to arise from the haematogenous spread of septic emboli through the valveless veins of the frontal sinus mucosa to the marrow of the frontal bone.[1–3] It is associated with intracranial infection, both from direct and indirect spread, and carries significant mortality.[1–3] Although less common in children due to late development of the frontal sinus, over 25 paediatric cases have nonetheless been reported in the non-ophthalmic literature.[1–4] These often have occult sinusitis.[4] Periorbital swelling is described in approximately 30% of PPT cases, caused by downward spread of fluid, suggesting that PPT should be considered in the differential of periorbital oedema, especially if extending above the brow. Detailed cranial imaging, preferably MRI, is essential to confirm the diagnosis and highlight any associated intracranial pathology[4,5] (Figure 1–3).

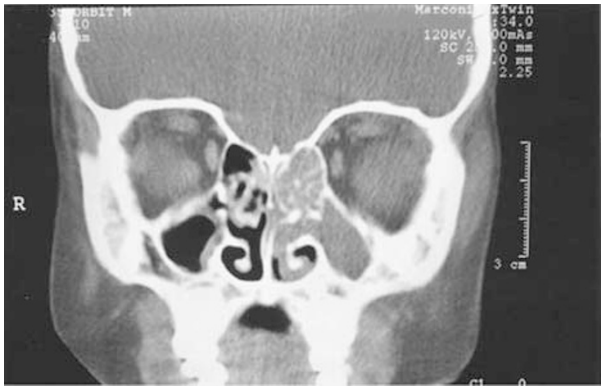

Figure 1 Unenhanced coronal CT scan of orbits and sinuses showing left maxillary/ethmoid sinus opacification but no postseptal orbital pathology.

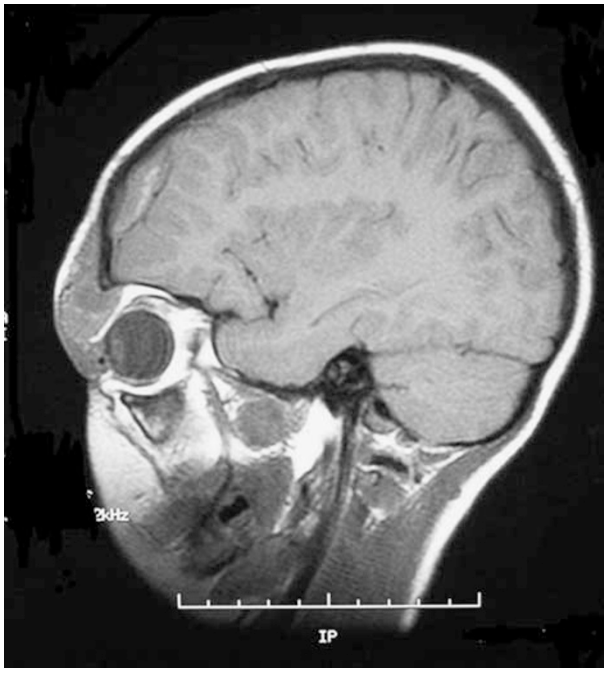

Figure 2 Sagittal MRI section (T1 weighted) showing Pott's puffy tumour and intracranial extradural abscess.

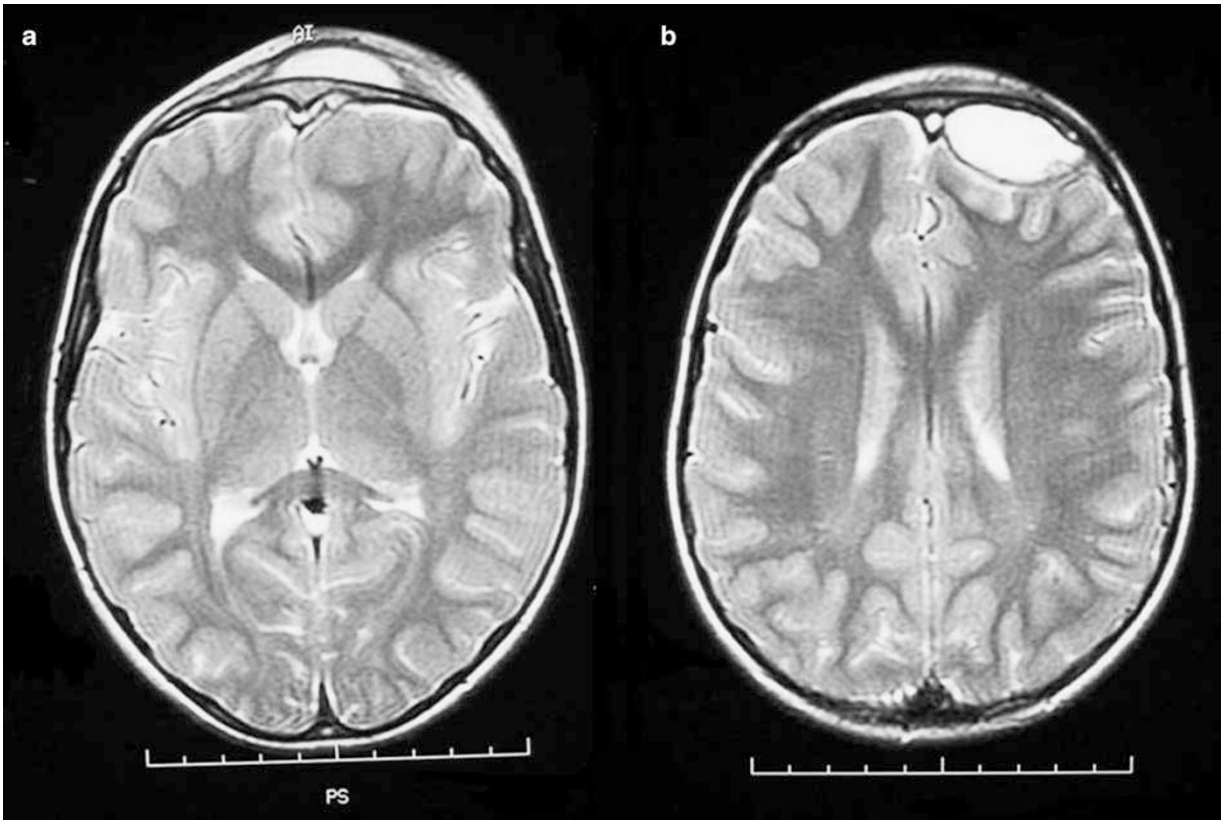

Figure 3 Axial MRI sections (T2 weighted) showing (a) subperiosteal abscess of frontal bone and (b) intracranial extradural abscess.

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Sir,

A clinicopathological report: white retinal detachment with a pseudohypopyon in a subconjunctival inclusion cyst

Our patient presented with a subconjunctival cyst associated with a pseudohypopyon. She was aphakic after cataract extraction 4 years before. One year later, she underwent encirclement, vitrectomy, cryotherapy, and gas tamponade for a retinal detachment. Two years on, she developed an anterior non-necrotizing scleritis.

The sclera was injected around the encircling band. There was a subconjunctival inclusion cyst with a white fluid level in the superonasal quadrant (Figure 1a). A white retinal detachment resembling the fluid in the cyst (Figure 1b) was seen. Communication between the cyst and subretinal space was confirmed with a B-scan ultrasound (Figure 1c) with secondary retinal incarceration. LogMar acuity was 0.78 in the affected eye.

Scleritis was considered causal in this fistula formation. Infective, neoplastic, and systemic inflammatory causes were excluded before surgical repair. Transconjunctival cyst aspiration biopsy grew no microorganisms. Papanicoloa staining is shown in Figure 2. She subsequently underwent excision of the conjunctival cyst, removal of the encircling band, scleral patch graft, and vitrectomy. Figure 3 shows histopathology of excised tissue. No suture material was present.

Three months later, the fundus showed a reticulated pattern of subretinal debris and