

Paediatric surgical 3rd nerve palsy: An unexpected cause

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ABSTRACT

Objective: To report a rare case of surgical 3rd nerve palsy that occurred in a young boy. **Method:** Case Report **Results:** A 13-year-old boy presented with sudden onset of left eye pain for two months associated with a left-sided headache and progressive drooping of the left eyelid. This was followed by episodes of nausea and vomiting for 3 days. His right and left visual acuity were 6/6 and 6/15 respectively. Examination of the left eye revealed an incomplete ptosis, a 6mm dilated pupil and positive relative afferent pupillary defect whilst examination of the right eye was normal. Extraocular movements of the left eye were restricted in all gazes except the lateral gaze. Fundus examination of both eyes was unremarkable. Humphrey visual field test showed incomplete bitemporal hemianopia. Computed tomography (CT) and CT angiography of the brain revealed a solid-cystic sellar mass with suprasellar and left cavernous sinus extension. Subsequent magnetic resonance imaging confirmed the diagnosis of pituitary macroadenoma measuring 3.5 x 4.6 x 3.1 cm. Further blood investigations lead to the diagnosis of prolactinoma with a raised serum prolactin level of 4005.9µg/L. The boy was treated with oral bromocriptine for 10 weeks and responded tremendously to the treatment with complete resolution of all signs and symptoms. **Conclusion:** Pituitary adenomas are a relatively common intracranial lesion with prolactinomas constituting the bulk of it. They frequently occur in middle-aged females with a female-to-male ratio of 10:1. In the paediatric-adolescent age group, prolactinomas comprise less than 2% of all intracranial tumours. This case reports an unusual presentation of prolactinoma in a boy causing compressive optic neuropathy and surgical third nerve palsy.

KEY WORDS:

Prolactinoma, paediatric, surgical third nerve palsy, pituitary macroadenoma

Paediatric orbital wall fracture and its associated cranio-facial injury in Hospital Universiti Sains Malaysia: 3-year review

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ABSTRACT

Objective: To describe clinical characteristic and association of the severity of orbital wall fracture with cranio-facial injuries in paediatrics patients. **Methods:** A retrospective study was conducted from 2016 till 2018 at Hospital Universiti Sains Malaysia, Kelantan. Patients with orbital wall fracture below age 18 years old were recruited and grouped into four groups based on number of orbital wall involved. **Results:** A total of 43 patients with mean 14.2 years old (3.44). The majority (90.7%) were boys. Group one with one orbital wall injury consist of 20.9% (9 patients), group two had 27.9% (12 patients), while group three and four made up of 32.6% (14 patients) and 18.6% (8 patients) accordingly. Among them 69.7% (30 patients) had intracranial injury, 58% (25 patients) had facial bone injuries, and 27.9% (12 patients) sustained base of skull fracture. There were a significant association between the number of orbital wall fractures with intracranial injury ($p=0.040$) and base of skull fracture ($p=0.041$). No statistical association was observed between number of orbital wall fracture with facial bone fracture ($p=0.083$). **Conclusion:** The majority patients sustained orbital wall trauma were boys. The main causes of paediatric orbital wall fractures were motor vehicle accidents, and number of orbital wall was significantly associated with intracranial injury and base of skull fracture. Thus urgent CT imaging of orbit inclusive of brain and facial bones is mandatory once there is a suspicion of an orbital wall fracture. Early detection of intracranial involvement and timely referral to neurosurgery team is indicated.

KEY WORDS:

Paediatric, orbital wall fracture, intracranial injury, facial, base of skull fracture