A suspected cavernous-carotid fistula with a normal computed tomography angiogram of the brain, what's next?

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ABSTRACT

Objective: To report a case of cavernous-carotid fistula with a normal CT angiogram of the brain but later on confirmed by a cerebral angiogram. **Method:** A retrospective case report. **Results:** A 70 year-old Malay lady with underlying diabetes presented with progressive left eye redness for 1 month associated with left eye protrusion. There was no blurring of vision, or eye pain and no headache, nausea or vomiting. Clinical examinations revealed tortuous dilated vessels with corkscrew appearance over left eye sclera. The proptosis in the left eye was confirmed with an exophthalmometer. Extraocular movement was slightly restricted but no diplopia. Anterior segment noted occasional anterior chamber cell. Intraocular pressure of the left eye was 24mmHg. Fundus examination showed left eye mild non-proliferative diabetic retinopathy with no diabetic retinopathy changes over the right eye. Systemic examination reviewed no palpable neck swelling with normal vitals. Blood investigation showed normal thyroid function test. The basic uveitic workout was normal. Findings from the fundus fluorescent angiography were not conclusive. CT Angiogram of the brain showed mild proptosis and relative enlargement of inferior and medial recti of the left eye with no tendon involvement. However, the superior ophthalmic veins appeared normal. A subsequent cerebral angiogram showed evidence of left indirect cavernous-carotid fistula with the branches noted from the cavernous segment of the internal carotid artery. **Conclusion:** In the diagnosis of cavernous-carotid fistula, cerebral angiography is the gold standard despite its invasiveness. A normal CT angiogram should warrant a cerebral angiography if cavernous-carotid fistula is suspected.

KEY WORDS:

Cavernous-carotid fistula, cerebral angiography, computed tomography angiogram, gold standard

A tale of two cases of orbital cellulitis in Kapit, Sarawak

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ABSTRACT

Objective: To report 2 cases of orbital cellulitis secondary to Melioidosis in Kapit, Sarawak. **Method:** Case Series. **Results:** Case 1 – A 58-year-old Iban man with uncontrolled diabetes mellitus (DM) presented with symptoms of pneumonia for the past 10 days. There was also swelling of the right upper eyelid which ultimately led to complete ptosis. The swelling was warm, tender, and erythematous and associated with chemosis and restriction of extraocular movement. After starting him on intravenous antibiotics, his general condition improved and the lid swelling localized to form a lid abscess. Incision and drainage (I&D) of the lid abscess was done. Cultures from blood and lid abscess yielded positive for Burkholderia pseudomallei. Case 2 –A 63-year-old Iban man with uncontrolled DM developed a high fever with worsening respiratory symptoms for the past 2 weeks. Right eye ptosis due to periorbital swelling and chemosis was noted during admission. His clinical condition deteriorated and he was intubated for respiratory distress and septic shock. Blood cultures grew B. pseudomallei and he was diagnosed with Disseminated Melioidosis. He was extubated when his condition was stable and the eyelid swelling eventually localized into a lid abscess. I&D was done and the same organism was isolated. **Conclusion:** Orbital cellulitis is a rare manifestation of Melioidosis and it is highly associated with disseminated septicaemia. The case series show similar outcomes in 2 cases of orbital cellulitis that eventually resulted in lid abscesses. It is also crucial to consider Melioidosis as the cause especially in endemic areas such as Kapit, Sarawak and in patients with immunocompromised states such as DM.

KEY WORDS:

Melioidosis, burkholderia pseudomallei, orbital cellulitis, lid abscess, diabetes mellitus