Primary nasopharyngeal olfactory neuroblastoma with intracranial extension: A case report

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SUMMARY

Olfactory neuroblastoma (ONB) is a rare malignant tumour commonly arises from basal cells of olfactory epithelium lining the cribriform plate, sectors of the superior turbinate, middle turbinate, and septum. It comprises 2 to 3% of all sinonasal tumours. There are, however, few cases reported where ONB are found to have ectopic origins. We present an unusual case of ONB arising primarily from nasopharynx with intracranial extension. It is in our best interest that only two cases of primary nasopharyngeal olfactory neuroblastoma were reported in accessible English literature, with none reported yet from Malaysia. This is a case report of ectopic ONB arising primarily from nasopharynx from Borneo Sabah. We reviewed English literature published on ONB from 1973 to 2019 and found that there were only 2 reported cases of primary nasopharyngeal ONB. A 53-year-old lady presented to the emergency room with reduced consciousness. She was reported to have one-day duration of severe headache with vomiting, fever for one week, photophobia, neck pain, and altered behaviour for four days. Further history from the family revealed a ten-year history of right frontal headache that was throbbing in nature, with recurrent right sided minimal non-investigated epistaxis for five years. She was subsequently intubated and admitted for intensive care. Urgent CT brain revealed an aggressive nasopharyngeal tumour infiltrating to adjacent sphenoid sinuses, right ethmoid sinus, right nasal cavity, clivus, bilateral greater wings of sphenoid bone, and petrous part of bilateral temporal bones causing expansile bony destruction. The mass also infiltrated the sellar region and cavernous sinus space. Bedside nasal endoscopy was performed and an irregular mass was seen occupying the right nasal cavity, preventing advancement of scope to assess nasopharynx. Histopathological examination of tissue sample taken from the mass confirmed the diagnosis of ONB, Hyams grade 2. Staging CT scan revealed a nasopharyngeal mass extending into the right nasal cavity and paranasal sinuses with base of skull bony destruction and middle cranial fossa extension. No cervical lymph node metastasis - stage group C (Kadish et.al.). No distant metastasis. MRI brain and paranasal sinuses revealed an irregular lobulated enhancing mass, with epicentre within the nasopharynx. The tumour extended into the right nasal cavity, paranasal sinuses and base of skull. Considering the unusual location of tumour origin for olfactory neuroblastoma, a repeated biopsy was performed in operation theatre under general anaesthesia. Histopathological examination of tissue sample supports the diagnosis of ONB. The patient subsequently underwent an operation for tumour debulking. Intraoperatively, most of the tumour was removed, with remnant left at the region of cavernous sinus where bleeding was encountered. Patient eventually passed away two weeks postoperatively at home due to massive bleeding, just before her clinic review date. Primary nasopharyngeal ONB is extremely rare that it has only been reported twice in published literature. Site of origin of ONB can be identified with the help of current radiological investigations. Origin, together with the extent of tumour growth, determine a surgeon's treatment strategy.

Life threatening cervical necrotizing fasciitis

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SUMMARY

Necrotizing Fasciitis of the head and neck is an uncommon rapidly spreading bacterial infection possibly lethal as it can involve airway. It is frequently seen in immunocompromised patients such as diabetes mellitus and the source of origin usually from oropharynx or teeth. We report a case of necrotizing fasciitis in a diabetic patient who presented to us with shortness of breath and 3 days history of progressive right neck swelling. In view of airway compromised, patient was promptly intubated and admitted in intensive care unit for stabilization prior operation. CT scan revealed extensive emphysema in all neck spaces extending to posterior mediastinal space, right thoracic wall and air fluid level noted in the right retrocrural region. Empirical antibiotic was started and changed accordingly to microorganism isolated. Aggressive wound debridement with proper wound dressing was done. Concurrently, the patient was managed together with cardiothoracic team for mediastinitis and right pleural effusion. Patient was discharged well despite having underlying disease of diabetes mellitus and complicated with airway compromise and descending infection. In order for patient with cervical necrotizing fasciitis to have more favourable outcome, it is crucial to make early diagnosis and the airway cases should be secured promptly. The source of infection can be eradicated with administration of intravenous antibiotic concomitantly with multiple wound debridement and meticulous wound dressing.