

Brown's Tumour Of The Hard Palate In Secondary Hyperparathyroidism; A Rare Encounter In Our Current Era

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Introduction: Brown tumor of hyperparathyroidism (HPT) is rare and not frequently seen in our current practice due to development of healthcare system. However, in underdeveloped countries, HPT goes untreated. HPT is explained as primary, secondary and tertiary. Brown tumor or osteitis fibrosa cystica is a benign bone lesion that is caused by HPT. A review of the literature over the last 10 years identified a total of 87 patients with 57 cases involving the facial region. Of those, twenty-four cases only had secondary HPT.

Case report: We report a case of 15 years old girl with underlying chronic kidney disease (Stage 5) on hemodialysis. She presented with palatal swelling and bone pain for 6 months. Physical examination revealed a large firm mass involving both sides of the palate. CT scan showed changes of secondary HPT with palatal tumor of the hard palate. Histopathology examination (HPE) confirmed the diagnosis of brown tumor. Subsequently, patient underwent total parathyroidectomy.

Discussion: Brown tumor is a bone lesion that is caused by osteoclast activity in HPT. Parathyroid glands include chief cell that produce PTH and the final result of increased secretion by the chief cells is HPT. The incidence of skeletal brown tumors in ESRD ranges from 1.5 to 13%, but this complication has been decreased with our recent development in our healthcare system. Extremities are most commonly involved areas with facial bones being rare. Diagnosis is dependent on histopathology with correlation with the clinical and endocrinology status.

Conclusion: Secondary HPT is a common complication of end-stage renal disease, with majority cases in underdeveloped countries where the disease is untreated or uncontrolled. As radiologist, we should be aware of possible presence of brown tumors in the facial bones to aid the surgeons in treating the patient accordingly either by total parathyroidectomy or resection with reconstruction.