

Brown Tumor as complication of Severe Secondary Hyperparathyroidism in Hemodialysis Patients: a Case Report

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Case Report

B. S., 75 yo male patient, undergoing dialysis treatment for over 5 years as a complication of Diabetic Nephropathy. The patient complained about bone pain, difficulties walking, and a need for wheelchair. Blood tests results have shown chronic hyperparathyroidism with PTH serum levels above 1000 for more than 3 years.

Background

Brown tumor of bone, also called osteitis fibrosa cystica is a rare non-neoplastic lesion resulting from abnormal bone metabolism in hyperparathyroidism (HPT). The commonly affected sites are facial bones, clavicle, ribs, pelvis, and femur. It can simulate a malignancy on clinical examination and routine radiographs. However, with fine needle aspiration cytology (FNAC) in combination with biochemical tests, a correct diagnosis can be rendered. Brown tumor has been reported in 1.5% to 1.7% of patients with secondary hyperparathyroidism, this rate tends to increase with the increased survival of patients with chronic renal failure.

Initial treatment should include control of HPT through normalization of serum calcium and phosphate, to enable a gradual tumor regression, with or without parathyroidectomy (PTx).



Results

B. S.'s was treated with CINACALCET 60 mg and Zemplar 5mcg.

Then he was sent to a CT scan:

“Many Non-neoplastic lesions, part intramedullary, part cortical along the femur double sided and pelvic bones, including acetabulum and ischium, part are intracortical”.

And for diagnosis he was administered to Fine Needle Aspiration BIOPSY for diagnosis which showed the following:

“The overall microscopic findings can fit to giant cell tumor of bone, however in view of clinical context, the possibility of brown tumor of bone should be considered, and is more favorable rather than former”.

Based on all the above, doctors diagnosed him with BT.

Conclusion /Application to Practice

Based on the diagnosis and symptoms, patient was sent to PTX, Which he didn't undergo because of deterioration in his health.

Nursing staff's role is crucial through accurate full anamnesis.