

Multicentric Bone Disappearing Disease – Gorham Stout Disease And Joint Replacement

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INTRODUCTION:

Osteolysis is a common finding in skeletal radiograph. Primary osteolysis is rare and a diagnosis of exclusion after causes of secondary osteolysis for example due to infection, metabolic and neoplastic causes has been investigated.

CASE PRESENTATION AND REPORT:

69 years old Female with no medical illness complained of bilateral knee pain over past 5 years. In addition she had chronic bilateral shoulder pain. There is no history of trauma.

On examination, bilateral knee are in varus position with reduced range of motion. Limited left hip motion. Shoulder range of motion was 0 to 140 degree.

Radiograph both knee show partial loss of medial femur condyle with osteophyte and reduction in joint space. Chest radiograph show loss of humeral head and glenoid and acromion process. Patient underwent bilateral total knee replacement in year 2014. Postoperatively patient was ambulating without aid until one year later patient complained of left hip pain with loss of function. Pelvic radiograph show osteolysis lesion in pelvic bone and defect over acetabulum and loss of left femur head. Left total hip replacement was performed.

Intraoperative findings show bone loss of posteromedial tibia plateau up to 3cm with hypoplastic lateral condyle of femur. Left hip operation later show loss of femur head with fibrous tissue filled at the defect region and loss of bone surrounding acetabulum especially at superior aspect. No sign of infection.

Histology findings of left acetabulum reported irregular sparse thin bony trabeculae with thick hyalinized fibrogranulation tissue exhibiting polypoidal configuration lined by benign synovial cells. No inflammation is seen. Up to 2 years follow-up, there is no further bone loss and loosening sign surrounding the metal implant in knee and acetabulum. Patient is pain free and ambulates without aid.



DISCUSSIONS:

Gorham Stout Disease is a rare type IV primary idiopathic osteolysis.(1)The disease was first described by Gorham and Stout in year 1955. It is characterized by histological findings of angiomatosis with proliferation of small thin wall vessels or lymphatic vessels and also radiological and clinical findings of osteolysis. Pathophysiology of the disease remains unclear. Initial radiology finding include patchy osteoporosis of bone while later developing rapid progressive bone loss extending to the surrounding bone. The treatment depends on severity of presentation. Large symptomatic lesion which affects function warrants surgical treatment for example resection of the lesion and reconstruction with prosthesis. Bisphosphonate was also used as medical therapy to slow down osteolysis.

CONCLUSION:

Joint replacement is effective for the patient without any sign of loosening or osteolysis seen in surrounding bone at latest follow up.

REFERENCES:

(1)Hardegger F et al.The syndrome of idiopathic osteolysis. Classification, review, and case report.J Bone Joint Surg Br 1985; 67: 88-93