

Fracture Neck of Femur with Multiple Lytic Lesions in Pelvis: A Case Report.

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Abstract: This is an unusual presentation of a case of fracture neck of femur with multiple lytic lesions in the pelvic bones. Fracture neck of femur was treated by bipolar hemiarthroplasty. Biopsy from lytic lesion in ilium showed it to be a case of paget's disease.

CLINICAL HISTORY

A 85 years old thin female patient, music teacher by profession, was admitted to the orthopedic service in March, 2010 with chief complaints of severe pain in her right hip joint for 3 weeks after a fall on the floor, and had inability to stand and walk. She was a known case of hypertension and diabetes mellitus. There was no history of unconsciousness & vomiting. She also gave a history of weight loss.



ON EXAMINATION

After admission patient was thoroughly evaluated clinico-radiologically; other biochemical investigations were also done accordingly. She was found to be a frail lady, afebrile and in obvious pain. Her cardiovascular, respiratory & neurological examination was unremarkable. On regional examination, the right lower limb was lying in external rotation attitude with a shortening of 2 ½ inches. No movement was possible because of extreme pain. Quadriceps muscle of right side was wasted and grade I bed sore was present on the sacral area.

INVESTIGATION

S. Electrolytes were Serum sodium was 102 meq/l & serum potassium was 3 meq/L, Urinary Hydroxyproline was elevated, S. Alkaline Phosphatase was elevated, S. calcium - 8mg/ dL and Radiographic examination showed a transcervical fracture of right neck of femur, multiple lytic lesions surrounded by sclerotic bone were seen, areas of osteoporosis were also seen and gallium bone scan show several of areas of increased uptake in the pelvic bone.

DIAGNOSIS

Regarding the pathological lesion, the following conditions were considered in differential diagnosis:

1. Pagets Disease
2. Metastatic Lesion
3. Reticulum Cell Sarcoma

TREATMENT

Her electrolyte imbalance was corrected and she was taken up for

surgery. Bipolar hemiarthroplasty was done through lateral approach. Excised head was sent for histopathology & culture examination. She had an uneventful post operative recovery.



PER-OPERATIVELY

After osteotomy of the neck, the acetabular cartilage was found to be healthy, so it was decided to opt for bipolar hemiarthroplasty. The stem was fixed using methyl methacrylate cement.

FOLLOW UP

Patient was made to walk by 3rd post operative day, she was able to walk with a stick by the second week and without support by 4 weeks; post operatively she was advised calcium supplements, bisphosphonates & Vit D₃ supplementation.

HISTOPATHOLOGY

Mosaic pattern of lamellar bone suggestive of pagets disease.

DISCUSSION

Although the paget disease rare in Indian subcontinent and patient when admitted in so much of pain, we thought of osteoporotic fracture or pathological fracture around hip due to metastasis, but appearances on x-rays are so characteristic that diagnosis seldom in doubt i.e. coarse trabeculae with multiple lytic lesion surrounded by thickened sclerotic bone at times there is bruit due to increased bone blood flow its diagnosis further confirmed by blood and urinary investigation with biopsy report suggest characteristic pattern of paget's disease.

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