

10871-Two Cases Of Patients With A Pathological Fracture Of The Proximal Femur That Achieved Bone Union After Surgical Treatment By Internal Fixation Combined With Radiotherapy

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Background: Proximal region of the femur is one of the sites that are most frequently affected by metastatic bone tumor. If a pathological fracture of this region occurs, the patient's quality of life is seriously affected. Therefore, surgical treatment is usually applied to the disease. Recently, endoprosthesis replacement is preferred to internal fixation because of its stability and durability. On the other hand, internal fixation is placed as an option of temporary treatment. In some cases, internal fixation has to be selected due to patient's comorbidities and poorer prognosis.

Purposes: The author presents two cases of patients with a pathological fracture of the proximal femur that achieved bone union after surgical treatment by internal fixation.

Patients and Methods: The age of the patients was 56 and 78 years. Both were female. Origins of metastatic tumors were the breast and the lung, respectively. The former had multiple liver metastases and idiopathic thrombocytopenic purpura. The latter had undergone partial resection of the contralateral lung against metastasis after lower lobectomy for the primary lung cancer (adenocarcinoma). Both had suffered a pathological fracture of the proximal femur due to a bone metastasis. Both were surgically treated by internal fixation using a gamma type intramedullary nail in consideration for the general status. Both had local radiotherapy preoperatively and postoperatively, respectively. Both had postoperative chemotherapy (Paclitaxel for the former, and Pemetrexed and Bevacizumab for the latter).

Results: Both fractures achieved bone union three and four months later, respectively. Both patients finally acquired ambulatory ability with the aid of a T-cane without pain. The functional score evaluated by the International Society of Limb Salvage (ISOLS) scoring system was both 87 percent.

Conclusions: Recent advance of molecular targeting therapy may contribute to completion of bone union of a pathological fracture even after surgical treatment by internal fixation combined with radiotherapy.

