



SUCCESSFUL TREATMENT OF FAILED SLIDING HIP SCREW IN A 78-YEAR-OLD PATIENT WITH PAGET DISEASE: DYNAMIC CONDYLAR SCREW AS AN ALTERNATIVE FOR REVISION OF SUBTROCHANTERIC ATYPICAL FRACTURES

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INTRODUCTION

We present a case of a 78-year-old patient with Paget disease who experienced a failure of a sliding hip screw fixation for a subtrochanteric atypical fracture.

The aim of this study is to describe the successful management of this challenging case using a dynamic condylar screw as an alternative revision procedure.

METHODS AND MATERIALS

The patient presented with breakage of screws and varus collapse 4 months after initial sliding hip screw fixation. Preoperative assessment included a thorough evaluation of the patient's medical history, physical examination, and imaging studies. Zoledronate intravenous infusion was administered to optimize bone quality, followed by calcium and vitamin D supplementation. Surgical intervention involved removal of the failed sliding hip screw, followed by the insertion of a dynamic condylar screw. The broken peripheral screws were left in the medullary canal, and proximal and distal fixation was achieved using a lag screw and cortical screws, respectively. Compression was applied, and bone graft was utilized.

RESULTS

At the 5-month follow-up, radiographic evaluation confirmed complete healing of the subtrochanteric fracture and the patient regained pain-free ambulation and functional independence.

DISCUSSION

Managing fractures in patients with Paget's disease requires careful surgical planning and intervention. Previous studies have indicated varying degrees of success based on the location of the fracture on the femur. Fractures located in the middle and distal thirds of the femur have been shown to respond positively to operative surgical management, leading to successful outcomes. However, fractures occurring proximal to the middle third pose challenges, often resulting in non-union, implant failure, and the need for revision surgery (Bradley & Nade, 1992). In this context, our case demonstrates the effective use of the dynamic condylar screw as an alternative revision procedure for failed sliding hip screw fixation, aligning with previous findings and contributing to the patient's successful recovery.

CONCLUSIONS

This case highlights the successful management of a failed sliding hip screw in a patient with Paget disease and an atypical subtrochanteric fracture. The use of a dynamic condylar screw as a revision procedure demonstrated favorable outcomes, including fracture healing, pain relief, and restoration of functional mobility. The dynamic condylar screw offers several advantages in revision procedures, such as anatomical reduction, bone sparing, possible fracture compression, and it can be considered a valuable alternative to intramedullary nailing in selected cases, particularly in patients with comorbidities like Paget disease. Early recognition of failed sliding hip screw fixation and prompt intervention are crucial for achieving satisfactory results.



Figure 1. Initial Surgical Intervention Utilizing a Sliding Hip Screw

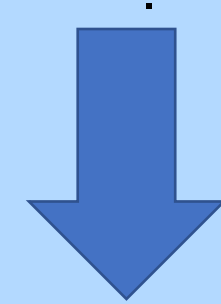


Figure 2. Postoperative Complication: Screw Breakage and Varus Collapse



Figure 3. Radiographic Outcome 3 Months Post-Revision Surgery with Dynamic Condylar Screw