

A Case Report: Non-Union of Medial Malleolus Secondary to Gouty Arthritis

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INTRODUCTION:

A non-union is an arrest in the fracture repair process. Gout is a form of inflammatory arthritis caused by intraarticular monosodium urate crystal deposition which may cause in nonunion.

REPORT:

A 65-year-old gentleman with underlying gout, hypertension and history of plating over right medial malleolus 10 years ago presented with right ankle swelling and pain for 1 week associated with pus discharge over right medial malleolus and fever.

Examination noted swelling over right medial malleolus measuring 3x3cm, erythematous, fluctuant and tender (Figure 1).



Figure 1: Right medial malleolus swelling

His white cell count was 23, CRP 106, ESR 25, and uric acid 595. X-Ray revealed osteonecrosis of the bone with loosening of screw. (Figure 2)



Figure 2: Osteonecrosis bone with loosening of screw

He underwent removal of implant and arthrotomy washout over right ankle. Intraoperatively noted 20cc of pus from right ankle joint with chalky material, loosening of

the screws and soft callus over medial malleolus (Figure 2). X-Ray post removal of implant noted osteonecrosis bone.



Figure 3: Multiple chalky material swelling



Figure 4: Osteonecrosis bone

DISCUSSION:

Gout is a common embolic disease characterized by elevated serum urate concentrations, acute arthritis and deposition of monosodium urate crystal. To our knowledge, non-union of medial malleolus secondary to gout has not been reported.

CONCLUSION:

Gout can be a root cause of non-union especially over the joint fracture.

REFERENCES:

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