

# LONG-TERM USE OF STEROID AND SECONDARY OSTOPOROSIS TO MULTIPLE DISPLACED METATARSAL STRESS FRACTURE: WITH RHEUMATOID ARTHRITIS A CASE REPORT

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## Introduction

In rheumatological diseases have been observed in a rate of 0.8% of non-traumatic insufficiency fractures. The most common sites of insufficiency fractures are pelvis, sacrum, tibia, the sections near to the insertion of the fibula, calcaneus and buttocks. Generally, bone – joint involvement in rheumatic diseases and osteoporosis connected with prolonged use of corticosteroids prepares the ground for these insufficiency fractures. In this case. We aimed to present the metatarsal fractures which we have identified in an unexpected localization in a patient the diagnosis of rheumatoid arthritis who has been secondary osteoporosis for a long time use of low-dose steroids.

## Case Presentation

Approximately for 12 years with a diagnosis of Rheumatoid Arthritis, 53-year-old male patient admitted because of the starting complaints pain and swelling in his left foot since 25 days. The patient was using low-dose corticosteroids without a break since approximately the last two years. In the verified surveys, performed in and was verified avascular necrosis of the talus and common arthritic changes depend on Rheumatoid Arthritis foot- ankle involvement , there were sensitiveness with palpation and swelling in the metatarsal region of the patient's examination. In radiography ,it was seen the displaced of 2nd, 3rd, 4th metatarsal basis' and nondisplaced fracture line in his 5th metatarsal basis , it was intact of lisfrank joint. ( **Figure-1**)

The patient's L1-L4 T-Score was found of -3.2. The was learned that ever now the patient didn't receive any treatment about osteoporosis. The patient which treated of orthopedic aspects, was started Alendronate sodium 70 mg and 2800 IU Vitamin D<sub>3</sub> treatment

## Discussion

The frequency of osteoporosis in patients with rheumatoid arthritis (RA) ranges from 4 to 24% and the frequency of osteopenia ranges from 28 to 61.9%. Glucocorticoid use was associated with decreased bone mass in 56.2% of subjects with RA.

As a result ; although stres fractures are not seen very rare in rheumatoid arthritis, it may delay and difficulty in diagnosis. Stress fractures are associated with in a high rate using of corticosteroid long-term in past. The patients which would be long-term using of corticosteroids, should be considered in the direction as given osteoporosis presentative treatment.



**Figure-1:** The patient's AP, oblique and lateral X-ray images