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Charcot foot complicated by Charcot hand

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A 53-year-old woman, type 2 diabetes for 14 year duration, controlled on insulin therapy presented to Port Said Diabetic Foot Clinic, Egypt in September 2009. She presented with erythema, swelling, warmness, and mild tenderness over the right hand for 4 weeks duration . There was no history of recent injury. She was diagnosed, in a private clinic, as cellulitis and treated with levofloxacin 500 mg /d, cephradine 1g twice a day and ibuprofen 400 mg twice a day for 15 days.The swelling of the right hand deteriorated.Her body temperature was 36.4 °C. Foot Examination revealed Charcot foot on the right side . The left foot was the seat of amputation of big toe, clawing of the 4 toes, a neuropathic planter ulcer over the 2^{nd} -3^{rd} MTH. She was wearing a therapeutic shoes on left foot to adapt for the dressings of the ulcer and a walker on right foot. She used to support herself during walking by using bad quality crutches with her right hand. Local examination of the hands showed a warm swollen right hand with erythema and mild tenderness. No wound or portal entry for infection was found. Plain radiography revealed no bony or joint abnormality. The laboratory studies disclosed mild anemia (Hb 100 g/L), TLC 8.00 ▫▫109/L with a differential of 70.6% neutrophils, 19.2% lymphocytes, and 8.1% monocytes). Normal Platelet count (265x 10L ') was found.Serum uric acid 3.6 mg/dl.The C-reactive protein level was 0.68 mmol/L (N < 0.1 mmol/) and ESR was 25mm/ h. No pathogen was isolated from the blood cultures.

The possibility of neuro osteoarthropathy of the hand was based on the long duration of diabetes, the presence of Charcot foot, the continuous use of the crutches that caused pressure induced by weight transfer to the hand during ambulation. and the lack of response to antibiotic treatment.The antibiotic and anti-inflammatory drugs were discontinued. The hand was immobilized in a removable long wrist brace with hard support and arm sling for rest her right arm . The patient was advised to continuously wear it. In follow-up visits the local signs of inflammation subside gradually and the hand condition continued to improve. In five weeks the patient's hand was completely improved and then moved to a lighter sling for rest. Diagnosis of Charcot arthropathy needs high degree of suspicion. It should also be not restricted to the foot involvement in diabetics.