

MISCELLANEOUS

Pictorial Continuing Medical Education

PIANO KEY SIGN IN RHEUMATOID ARTHRITIS

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A 48 yrs female patient presented in PMR OPD with symmetrical polyarticular joint pain and deformity for last 2 years. She was facing lot of difficulties to perform her ADL due to hand deformities and restriction of joint movements. She is already on tab methotrexate , sulfasalazine and hydroxychloroquine and intermittent etoricoxib. Unfortunately she did not receive any other non-pharmacological management since the disease onset.

On examination there was classical boutonniere and Z deformity of both hands (Fig. 1). Feet also showed classical deformity of rheumatoid arthritis like hallux valgus and forefoot abduction. Interestingly there were small swellings over extensor surface of bilateral distal forearm. On palpation it was found as protruding ulnar head (Fig. 2) which were pressed down with thumb. When we released the pressure it was again springing back in the same position just like a piano key. When we did DRUJ stress test by manipulating the distal ulna in dorsal and volar direction while the wrist was held in pronated and supinated position there was no painful laxity. Thereafter we did an X-ray of both wrists joint. This excluded any fracture of styloid process of ulna. Thus we confirmed the diagnosis of the classical piano key sign of rheumatoid arthritis.



Fig. 1 Bouttonniere and Z deformity



Fig. 2 Protruding ulnar head

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