

**A CASE OF EROSIVE SEROPOSITIVE RHEUMATOID ARTHRITIS WITH
RHEUMATOID NODULES AND DIGITAL VASCULITIC ULCER****¹*Avijit Saha and ²Parna Roy**¹Malda Medical College Doctor's Quarter, Type 1, Flat no 4B. Pin-732101, Malda Town, Malda, West Bengal.²Department of General Medicine, Malda Medical College and Hospital, Malda, West Bengal, India.***Corresponding Author: Avijit Saha**

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Presentation

A 40 years old female patient of known Rheumatoid arthritis for last 6 years presented with severe debilitating joint pain, swelling and restriction of movement in her small joints of hands, feet, both ankles and knees for last few months. She also had multiple ulcers over knuckles and fingers of both hands [Figure 1] and one medium sized ulcer over lateral malleolus of right foot with occasional discharge from ulcer sites [Figure 4]. She also reported tingling, numbness sensation over her hands and feet. Her medical history revealed that she used to take over the counter drugs for her relapsing-remitting pain but no definitive treatment she had ever received. Examination revealed tenderness, swelling, limitation of movement of bilateral wrists, Metacarpophalangeal (MCP), Proximal Interphalangeal (PIP), metatarsophalangeal joint (MTP), ankle and knee joints. There was mild ulnar deviation of MCP joints of both hands and hyperextension of PIP joints and flexion of the DIP joints of right middle, ring fingers - that kind of deformity is described in literature as "Swan neck deformity" [Figure 1]. There was flexion of PIP joints and hyperextension of DIP joints of four fingers of left hand; and index finger of right hand; and that is classically described in literature as "Boutonniere deformity" [Figure 2]. The thumb of both hands were flexed at MCP joints and hyperextended at interphalangeal joints what is called "Z deformity of the thumb" [Figure 3]. Patient also had multiple painful ulcerated lesions in the dorsum of finger and one medium sized Grade II ulcer over lateral malleolus of right foot [Figure 4]. We also noticed few localised non tender nodular swelling over the fingers that are consistent with Rheumatoid nodules and some of them were ulcerated also. Laboratory tests revealed elevated Erythrocyte Sedimentation Rate (ESR), C-Reactive Protein (CRP), platelet count. Hemogram revealed Anaemia of Chronic disease. Serological test were positive for RA factor, anti-cyclic citrullinated peptide (anti-CCP) and negative for any antinuclear antibodies (ANA), antineutrophil cytoplasmic antibodies (ANCA) and cryoglobulins. Radial and Ulnar arteries were clear in USG- Doppler study at wrist. Lower Limbs ABPI (Ankle Brachial Pressure index) were calculated and found to be 0.9 in both limbs. Hand X-ray showed radiographic signs consistent with rheumatoid arthritis. Biopsy was taken from Lateral malleolus ulcer site and revealed signs of chronic inflammation; discharge culture showed no growth. Clinico-laboratory and radiographic findings taken together: Rheumatoid Arthritis activation with severe deformities with vasculitic ulcers and Rheumatoid nodules, diagnosis was made.

**Figure 1: Right Middle, Ring Fingers Showing "Swan Neck Deformity".****Figure 2: Four Fingers of Left Hand and Index Finger of Right Hand Showing "Boutonniere Deformity".**



Figure 3: Thumb of Both Hands Showing "Z Deformity of The Thumb".



Figure 4: One Medium Sized Grade II Ulcer Over Lateral Malleolus of Right Foot – Rheumatoid Vasculitic Ulcer.

DISCUSSION

We know Rheumatoid Arthritis is a joint erosive disease with potential of severe physical disability if left untreated. Rheumatoid Arthritis may have many extra articular manifestations like vasculitis, subcutaneous nodules, peripheral neuropathy, lung involvement, etc. The overall incidence of vasculitis in RA is quite rare, occurring in no more than 1% of cases while RA is the most common form of chronic inflammatory Arthritis in adults.

RV(Rheumatoid vasculitis)causes inflammation and narrowing of small to medium sized blood vessels and commonly affects the vasculature of skin, nerves and manifests as purpuric spots, livido-reticularis, necrotising digital ulcers, mononeuritis multiplex.

A number of factors have been implicated for the development of RV. These areLong-standing, severe RA, for 10 or more years, high concentrations of “rheumatoid factor” antibodies, Felty’s syndrome, presence of rheumatoid nodules, firm lumps under the skin around the joints of RA patients and smoking cigarettes. Skin biopsy in Rheumatoid Vasculitis is usually for exclusion of atypical infections such as mycobacterium infection and for exclusion of malignant transformation. Rheumatoid nodules are also not frequent, occurring in 30% cases of RA. They tend to be firm, non tender

nodules developing in area exposed and repeated traumatic areas of bones and may also occur in the lungs, pleura, pericardium. The aspect that makes this case particularly important is the fact that the disease can evolve for many years and can lead to severe deformities and physical disabilities along with involvement of extra-articular structures. It is also important to be aware of the development of Rheumatoid vasculitis in clinical course of the disease that needs treatment with additional immunosuppressive agents, biologicals. So the appropriate treatment can be instituted and patient can live with disability free life.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient has given her consent for her images and other clinical information to be reported in the journal. The patient understands that her names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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