



RHUPUS SYNDROME: AN OVERLAP SYNDROME OF SLE AND RA

Dr. A. Mohammed Rafi

Postgraduate, Department of Medicine, Kurnool Medical College, Kurnool-518002. A.P.

Dr. P. Rajasekhara Swaroop*

Postgraduate, Department of Medicine, Kurnool Medical College, Kurnool-518002. A.P. *Corresponding Author

KEYWORDS :

INTRODUCTION:

Rhupus syndrome is a rare combination of rheumatoid arthritis and systemic lupus erythematosus, and is characterized by the presence of erosive arthritis together with symptoms and signs of systemic lupus erythematosus. Rheumatoid arthritis has a worldwide prevalence of approximately in 0.5–1.0% of adult population and SLE prevalent in 20–150/100,000. It is discussed that the question of whether RA and SLE occur in the same patient, the so-called “rhupus,” or whether any deforming and erosive disease might be integral to the arthritis of SLE

CASE REPORT:

A 34-year-old female was admitted with the complaints of intermittent pain in hand joints and morning stiffness for the past 10 years. She gave a history of alopecia, fever, fatigue, malar rash, and oral ulcers for the last 10 years. She presented with GTCS seizures. On physical examination, she had deformity, tenderness and swelling on the 3rd and 4th. proximal interphalangeal joints bilaterally. swelling and tenderness on the wrist joints and MCP bilaterally, swan neck deformity on 3rd & 4th fingers of the both hands, and bilateral ulnar deviation, ulcers and deformity over both lower limbs.



Fig-1: Joint Deformities



Fig-2: Swanneck deformity



Fig-3: Vacuities Ulcers

INVESTIGATIONS :

pancytopenia, an ESR 68 mm/h, C-reactive protein of 3.39 mg/dL, RA factor of 114 IU/mL, anti-CCP level of 84 U/mL, antinuclear antibodies (ANA) 4+ (1/100 positive), anti-dsDNA positive with 3.4 (>1.1 positive), and C4 14 mg/dl. Urinalysis showed microscopic haematuria (red blood cells 9/high-power field). Urine protein-to-creatinine ratio (UP/CR) is 50 mg protein per gram creatinine (normal <30mg protein for 24 hours in urine). Renal and liver function tests were normal. MRI brain normal, EEG normal.

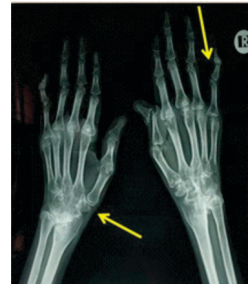


Fig-4: Joint deformities and erosions

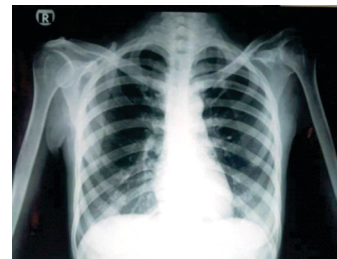
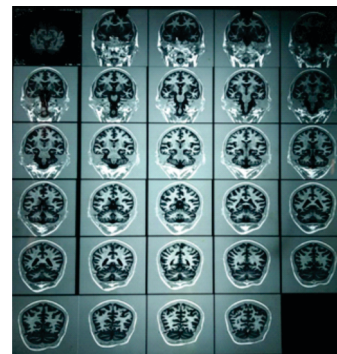


Fig-4: Joint deformities and erosions



Chest X-ray

DISCUSSION:

Rhupus is a complicated condition, and a debate still exists with regard to its definition and diagnosis. Amezcua-Guerra Rhupus is a complicated condition, and a debate still exists with regard to its definition and diagnosis. et al. [6] stated that the presence of anti-CCP antibody, high C-reactive protein values, and shared epitope are characteristics of rhupus. Previous reports have demonstrated that

anti-double-stranded DNA (anti-dsDNA), anti-Smith (both highly specific for SLE), anti-SSA, anti-SSB, antiribonucleoprotein, ANA, anti-cardiolipins, and rheumatoid factor are positive in patients with rhus [3,7]. There is a shared autoimmunity in the pathogenesis of RA and SLE. Genetic studies supported this shared autoimmunity [6]. It was identified that TAP2*0201 (RA and SLE) and TNF-308A gene variants in the same chromosomal region increase susceptibility to autoimmune diseases such as RA, SLE, and Sjögren syndrome [8]. On the other hand, PDCD1, STAT4, FCRL3, and PTPN22 genes were found to be associated with RA and SLE. It is demonstrated that HLA-DR1 and HLA-DR2 alleles were significantly increased in patients with rhus [7, 9–11]. Chan and colleagues suggested that anti-CCP+ patients with SLE are more likely to have erosive arthritis, and anti-citrullinated antibodies may have a pathogenic role in the development of major erosions [12]. Amezcua-Guerra et al. demonstrated that the anti-CCP antibody frequency and titers in patients with rhus were similar to those in patients with RA but significantly higher than those in patients with nonerosive arthropathy in SLE [6]. Rhus syndrome is characterized by symmetric polyarthritis of the small and large joints and symptoms of SLE and by the presence of specific autoantibodies with high specificity (anti-dsDNA antibody or anti-Smith for SLE and rheumatoid factor or anti-citrullinated peptide antibodies for RA) in our patients

Consequently, rhus arthropathy is an overlapping syndrome of rheumatoid arthritis and systemic lupus erythematosus that is defined by erosive polyarthritis accompanied by an overlap of clinical and immunological symptoms. Physicians should remain alert to manifestations of autoimmunity and overlapping disease features. We wanted to draw attention to awareness for early recognition and prompt diagnosis in order for the effective treatment of this disease.

CONCLUSION:

Rhus is a comorbid condition of lupus and RA that is defined by erosive polyarthritis accompanied by an overlap of clinical and immunological symptoms. Less is known regarding the aetiology of this disease, although its prevalence has rapidly increased from 0.09 to 9.2%, indicating the need for more detailed studies.

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