Original Research Article

A Hospital Based Study to Evaluate the Management of Psoriasis Arthritis and Recovery of Lesions

Kailash Chander Khatri[1], Ramesh Kumar[2*]

[1]Assistant Professor, Department of Dermatology, Government Medical College & Associated Groups of Hospital, Barmer, Rajasthan, India

[2]Assistant Professor, Department of Orthopaedic, Government Medical College & Attached Groups of Hospital, Barmer, Rajasthan, India

Received: 10-11-2020 / Revised: 09-12-2021 / Accepted: 26-01-2021

Abstract

Background: Psoriatic arthritis (PsA) is an inflammatory pathology involving joints and has chronicity; occurring patients affected with psoriasis. Hence; the present study was undertaken for evaluating the Management of Psoriasis Arthritis and Recovery of Lesions. **Materials &Methods:** A total of 18 patients with presence of PsA were enrolled. Complete demographic details of all the patients were obtained. All the patients were divided into three study groups depending upon type of treatment done as follows: Group A: patients treated with Sulfasalazine,Group B: patients treated with biological therapy (TNFα), and Group C: Patients treated with Leflunomide. Comparison with pre-treatment clinical profile was done and resolution was categorized as follows: Complete resolution: Complete resolution of clinical symptoms, Significant resolution: Resolution of more than 50 percent of the clinical symptoms, Insignificant resolution: Resolution of less than 50 percent of the clinical symptoms and No effect: Absence of any type of clinical improvement. All the results were recorded and analysed. Statistical analysis was done using SPSS software. **Results:** Insignificant resolution occurred in 2 patients of group A, 2 patients of group B and 2 patient of group C. No effect was seen in 1 patient of group A, 1 patient of group B and 3 patients of group C. **Conclusion:**Sulfasalazine and biological therapy significantly results in resolution of the lesions in PsA patients.

Key words: Psoriasis, Arthritis, Inflammatory.

Introduction

Psoriatic arthritis (PsA) is an inflammatory pathology involving joints and has chronicity; occurring patients affected with psoriasis. One of the characteristic finding seen in these patients is absence of rheumatoid factor in serum. Understanding about the etiologic profile of this particular pathology is still unclear. However; researchers have pointed towards genetic predisposition as a risk factor for its development. Damaging alterations in the osseous tissue usually appear after a few months from the onset of clinical symptoms[1-3]. Data from the past studies show that it affects approximately one third of the patients with psoriasis. The overall incidence of this pathology among general population has been reported to be a little less than 1 percent. Maximum incidence of this pathology is reported to be present in Sweden. The profile of PsA denotes to four main areas: psoriatic skin pathologies, the synovial membrane pathologies, lesions of tendon and ligament entheses and inflammatory lesions within the bone and cartilage[4-6]. Hence; the present study was undertaken for evaluating the Management of Psoriasis Arthritis and Recovery of Lesions.

Materials & methods

The present study was conducted at Government Medical College & Associated Groups of Hospital, Barmer, Rajasthan (India) with the aim of assessing the Management of Psoriasis Arthritis and Recovery of Lesions. A total of 18 patients with presence of PsA were enrolled. Complete demographic details of all the patients were obtained. Clinical assessment of the patients was done and severity (along with surfaces with artificial bearing surfaces has enabled surgeon to extent) of involvement was recorded. Diabetic, hypertensive and pregnant subjects were excluded from the present study. All the patients were divided into three study groups depending upon type of treatment done as follows:

Group A: patients treated with Sulfasalazine,
Group B: patients treated with biological therapy (TNFα), and
Group C: Patients treated with Leflunomide

Therapy was continued according to their respective groups and patients were recalled for follow-up for assessing the resolution of lesion. Comparison with pre-treatment clinical profile was done and resolution was categorized as follows:

- Complete resolution: Complete resolution of clinical symptoms
- Significant resolution: Resolution of more than 50 percent of the clinical symptoms
- Insignificant resolution: Resolution of less than 50 percent of the clinical symptoms
- No effect: Absence of any type of clinical improvement

All the results were recorded and analysed. Statistical analysis was done using SPSS software.

Results

Mean age of the patients of Group A, Group B and Group C was 38.4 years, 41.9 years and 43.7 years respectively. There were 4 males and 2 females in group A and group B, and 3 males and 3 females in group C. Significant resolution occurred in 3 patients of group A, 3 patients of group B and 1 patient of group C. Insignificant resolution occurred in 2 patients of group A, 2 patients of group B and 2 patient of group C. No effect was seen in 1 patient of group A, 1 patient of group B and 3 patients of group C.

**Correspondence*
Dr. Ramesh Kumar
Assistant Professor, Department of Orthopaedic, Government Medical College & Attached Groups of Hospital, Barmer, Rajasthan, India.
E-mail: cutecreations84@gmail.com

Table 1: Demographic data

Parameter	Group A	Group B	Group C
Mean age (years)	38.4	41.9	43.7
Males (n)	4	4	3
Females (n)	2	2	3

Table 2: Resolution on follow-up

Parameter	Group A	Group B	Group C
Complete resolution	0	0	0
Significant resolution	3	3	1
Insignificant resolution	2	2	2
No effect	1	1	3

Discussion

Psoriasis has a global prevalence of about two percent. However; considerable variation exists in terms of different geographic locations. The most common type of psoriatic lesion is plaque type. PsA is routinely classified under the wider category of seronegative spondyloarthropathies, In the present scenario, no laboratory tests exist which can guide to a PsA diagnosis. Acute-phase reactants like ESR and C Reactive proteins might be elevated, thereby indicating active inflammatory response. Roentgenic data like X-rays of the extremities can authorize the clinical joint involvement and demonstrate clue of erosive alterations. Additional destructive deviations include osteolysis that might result in traditional pencil-in-cup deformity. Other radiographic features suggestive of PsA can include proliferative changes with new bone formation seen along the shaft of the metacarpal and metatarsal bones[7-9].Hence; the present study was undertaken for evaluating the Management of Psoriasis Arthritis and Recovery of Lesions.In the present study, mean age of the patients of Group A, Group B and Group C was 38.4 years, 41.9 years and 43.7 years respectively. There were 4 males and 2 females in group A and group B, and 3 males and 3 females in group C. Significant resolution occurred in 3 patients of group A, 3 patients of group B and 1 patient of group C. Leflunomide is an oral agent that has been demonstrated to bean effective line of therapy in PsA patients (Paccou J et al). With advancement of both time and research, along with rapid progress in the field of therapeutics, TNFα has emerged as a potent cytokine in treating patients with inflammatory arthritis. It belongs to the class of tumor necrosis factor inhibitors (TNFis). Data from the previous literature have shown that all TNFis are efficacious in treating PsA: refining joint disease activity, constraining progression of structural deterioration, and refining function and overall quality of life (Hochberg MC et al). The TNFiagents at the same time also results in improvement of psoriasis along with dactylitis, enthesitis, and nail changes. Patients with axial disease benefit from TNFi, but the evidence of TNFi effectiveness is extrapolated from studies in axial spondyloarthritis (Soriano ER et al). Tumor necrosis factor inhibitors can be used as monotherapy, although there is some evidence for using TNFi drugs with MTX in PsA. Combination therapy can potentially prolong the survival of the TNFi drug or prevent formation of antidrug antibodies (Behrens F et al)[10-13].In the present study, insignificant resolution occurred in 2 patients of group A, 2 patients of group B and 2 patient of group C. No effect was seen in 1 patient of group A, 1 patient of group B and 3 patients of group C. There have been few controlled studies of slow-acting drugs in patients with psoriatic arthritis. Gold and methotrexate have been found to be effective in the treatment of psoriatic arthritis, but their use is limited by toxicity. Antimalarials, penicillamine, azathioprine, cyclosporin and vitamin A derivatives have been attempted with limited and conflicting results. Several recent articles have suggested that SSZ could be an effective and safe drug in the management of psoriatic arthritis. Various therapeutic approaches vary for subject with only psoriasis and subject with PsA. Certain comorbidities are associated with PsA—cardiovascular disease, obesity, metabolic syndrome, diabetes, inflammatory bowel disease, fatty liver disease, chronic viral infections (hepatitis B or C), and kidney disease. These comorbidities can affect the choice of therapy for the patient. Other factors affecting treatment choices include patient preference regarding mode and frequency of administration of the medication, potential AEs, requirements of laboratory monitoring or regular doctor visits, and the cost of medications[10-12].

Conclusion

From the above results, the authors conclude that Sulfasalazine and biological therapy significantly results in resolution of the lesions in PsA patients.

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Conflict of Interest: Nil
Source of support:Nil