

Post-Streptococcal Reactive Arthritis, A Case Report

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Abstract

Post - streptococcal reactive arthritis, a Case Report (9 year follow up) and review of the literature.

A 38 year old male patient; was seen in out-Patient Department during August'88 with PIP arthritis of left middle finger which progressed later asymmetrical poly-arthritis. Subsequently it was diagnosed as a case of post infective (streptococcal) polyarthritis and treated appropriately with good result. Post infective poly arthritis is a common cause of rheumatism and often was not entertained in differential diagnosis.

Case Report

A 38 years old man was seen as an out patient in August'88 with "spindling" of left middle finger. He was provisionally diagnosed as a case of tuberculous dactylitis and given a course of anti-tuberculous therapy. After completion of the course, he developed PIP arthritis of left index finger with arthritis of left sternoclavicular joints both wrists and both ankles. No other systemic manifestation was found. Past history was scrutinized and found that he had scrotal swelling with recurrent fever for which he was operated in '77. Blood investigations showed :

Haemoglobin	- 11.7 gms
TC	- 6100
Polymorphs	- 60
Lymphocytes	- 32
Eosinophils	- 8
ESR	- 3mm per hour
ASO Titre	- 400 IU

and RA factor, CRP were within normal limits.

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He had a course of antibiotics (Procaine Pencillin) which completely relieved him from symptoms for about 5 years. Again in '95, he reported to our Out -Patient Department with asymmetrical PIP joint involvement of both hands and right wrist. Joint No other system was involved. Routine blood examination showed a mild rise in ESR (26 mm/hour)and RA factor as well as, ASO Titre were within normal limits while CRP was elevated (2.4 mg% - Our lab value less than 0.6 mg%) and HLA B27 was negative. His asymmetric poly arthritis is not fitting into ARA criteria for rheumatoid arthritis as well as presence of previous infective focus was more in favour of post-infective poly arthritis (recurrence) He is again put on a course of antibiotics (procaine pencillin) NSAID's with total disappearance of symptoms within a week and continue to be asymptomatic as on week of June 97.

Discussion

Post streptococcal reactive arthritis is diagnosed in patients with group A Beta Haemolytic streptococcal infection and predominant articular involvement in adults.

History of preceding infection like sore throat, lymphangitis etc., is usually elicited in most cases of post streptococcal reactive arthritis.

The clinical manifestation of post streptococcal reactive arthritis constitute a spectrum that ranges from an isolated transient monoarthritis to 3 more severe multisystem disease. It can mimic soft tissue rheumatism, monoarticular arthritis, symmetrical polyarthritis, asymmetrical poly/pauciarthritis and spondylogenic arthritis. 'Dactylitis or Sausage Digit' a diffuse swelling of a solitary finger (or) toe is a distinctive feature of reactive arthritis. Other system involvement like carditis glomerulonephritis, vasculitis are reported even in adults. So these patients must be checked and investigated if necessary for multisystem involvement and followed up periodically.

Presence of ASO Titre confirms the diagnosis but its absence does not exclude PSRE. Streptococcal cell wall antigens are implicated in articular involvement. Immune chemical analysis and immune electrophoresis of serum/synovial fluid is more useful in detection of antigen/antigen-antibody complex. Although, typing for B27 is not needed to secure the diagnosis in clear cut cases, it has prognostic significance.

Previously the prevailing dogma held antibiotics were of no benefit in reactive arthritis.

Now it is found, appropriate course of antibiotics may control or ameliorate the disease. In few cases, refractory to this simple treatment may require immunosuppressive agents such as azathioprine, methotrexate and sulfasalazine.

Conclusion

Chronic and recurrent form of arthritis may occur with post streptococcal infection. Post infective reactive arthritis due to many organisms may present with various rheumatic complaints. It is worth - to search (or) presume the incriminating microbe and institute appropriate therapy which may abolish (or) retard the severity of the disease.

References

1. Dr. Prakash K. Pispati, Reactive Arthritis, A painful yet manageable disease, pain Management, Volume I; No.4, 1992.
2. Livneh A, Sharmal Sewell K.L, Keiser HD. Multi-system disease in post streptococcal arthritis. *Ann Rheum Dis* 1991, 328 - 329.
3. Rytel MW., Microbial antigen detection in infectious arthritis. *Clin Rheum Dis*. 1978, 4, 83.
4. Greenblatt JJ; Hunter N, Swwab JH. Antibody response to streptococcal cell wall antigen associated with arthritis in rats. *Clin. Exp. Immunol*, 1980; 42; 450.
5. Harrison's Principles of Internal Medicine Thirteenth edition, Volume II, Page 1667-1669.