

Use of Cortico-Steroid in Rheumatoid Arthritis

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Case Report

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Abstract: Rheumatoid Arthritis is an autoimmune disease which consists Joint pain, inflammation, synovial proliferation and damage of articular cartilage. Morning stiffness along with joints pain is a primary diagnosis. If not treated it can lead deformity of the wrist, fingers, toes. NSAIDs are the first line treatment. Now a days DMARDs are frequently used as soon as RA is confirmed along with some corticosteroids. The present study reveals that use of prednisolone has a miraculous pain relieving effect over deflazacort even for short term regime.

Keywords: Corticosteroids, DMARD, NSAID, Methotrexate.

INTRODUCTION

Rheumatoid Arthritis (RA) [1, 2] is an auto immune disease. Number of peoples are suffering in the different part of the world. Immune complexes release 'cytokines' which secrete Lysosomal enzymes that damage cartilage while Prostaglandin produced during this process enhance the pain frequency. Acute condition may lead crippling disorder & deformation of the joints. NSAIDs are the first line of treatment to overcome symptomatic relief from pain. In chronic cases non biological drugs called disease modifying anti rheumatic drugs (DMARDs) are used to treat it. Methotrexate [3], an anticancer drug is a first choice immunosuppressant in low dose but long term use may cause liver cirrhosis, therefore continuous monitoring of SGAT, SGPT and CBC [4] is necessary. Non-Biological drug used are SulphaSalazine (an anti-inflammatory drug), hydroxychloroquine (an antimalarial) but these accumulate in tissues, which produce retinal damage. Leflunomide [5] is an alternative drug to methotrexate.

It inhibits proliferation of stimulated lymphocytes. Recently biological agents [6] like protein/monoclonal antibodies that bind and inhibit cytokines are also being used. But all are expensive and suppress immunity. Along with DMARDs some common gluco-corticosteroids are given as Anti-inflammatory agents. They produce prompt relief and slow down joint destruction & bony erosion. Long term use may cause serious disadvantages.

CASE STUDY

A patient aged (55) was suffering from Rheumatoid arthritis since April 2014, confirmed by positive RA test (25614 IU/ml on 28/2/14). Patient had complaints of morning stiffness and pain in wrist and toes. Pain threshold used to increase during winter season. He consulted Rheumatologist; initially he was given an Anti-metabolite, Methotrexate (15 mg) once a week along with folic acid and NSAID for six months. Tab. Mexate potency was gradually decreased to 10mg for the next 12 months followed by 7.5 mg for 3 months

and 5 mg dose for another 3 months and finally 2.5 mg for 9 months. During this period patient condition was becoming gradually good enough even taking no glucocorticoid. Though persisting low grade swelling and pain intermittently. Suddenly RA condition was relapsed also confirmed by RA factor (>704 on 30/3/17). Wrist swelling & inflammation severely observed for 3-4 months. Treatment was again started by giving folitrix injection 20ml per week for 3 months with defza 6 mg OD (1 month), 3 mg (15d) 1 mg (3 months) and tab. Mexate 20mg/week replaced by injection. But inflammation process and pain was not recovered. Analysing such condition Rheumatologist has changed the corticosteroid and given prednesolone 5 mg in place of defza for one month especially in night. Patient observed magical change in his life. After taking one week dose of prednesolone, inflammation and joints pain have disappeared and still feeling no disorder even after 3 months during winter. To avoid any adverse effects, investigations carried out on regular basis during the therapy which is as follows.

Table-1: Investigation carried out (on 21/08/14)

SGOT	SGPT	Serum creatinine	Hb	ESR
41.90 IU/L	47.12 IU/L	1.37 mg/dl	13.5 g/dl	40 mm

Table-2: Investigation (on 12/10/15)

SGOT	SGPT	Serum Creatinine	Hb	ESR
30 IU/L	24 IU	-	12.2 g/dl	20 mm

Table-3: Investigation (on 11/09/16)

SGOT	SGPT	S. Creatinine	Hb	ESR
20.95 IU/L	22.51IU/L	1.44 mg/dl	13.3 g/dl	27mm

Table-4: Investigation (on 16/11/17)

SGOT	SGPT	S. Creatinine	Hb	ESR
50.6 IU/L	73.3 IU/L	1.2 mg /dl	12.9 g/di	38mm

RESULTS AND DISCUSSIONS

Above study clearly shows that in some cases severe pain due to Rheumatoid Arthritis, the use of gluco-corticosteroid especially prednesolone 5mg may be a good choice to get relief instead of Deflazacort and other corticosteroids. Prednesolone drug is more potent but flood retention may occur when given in high dose. It was also observed that only initial dose of the drug even for short period is enough to produce its positive effect with minimum side effects. Investigation reports taken on regular interval show no significant changes in values also.

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