

## OBSERVATIONS ON INDIGENOUS DRUGS IN CHRONIC JOINT LESIONS

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### INTRODUCTION

Painful joint lesions are so common, yet their treatment has been quite unsatisfactory. The innumerable methods of treatment which have been employed from time to time point to incessant attempts on the part of physicians to achieve satisfactory answer to this disabling condition. Out of the many painful joint conditions, the treatment of Rheumatoid and Osteo-arthritic type of the joint lesions is most disappointing. The description of such joint lesions is met in the older system of medicine, such as Charak Samhita, Sushruta and Vagbhata. Indigenous drugs have often been employed in the past for the treatment of these joint affections satisfactorily. We have therefore considered it worthwhile to give a trial to these drugs.

Gold, which has been found recently to be an useful metal, was extensively used in the form of Bhasma by the Ayurvedic Physicians. Other drugs which have been recognised for this condition are 'Mahayograj Guggul' and 'Maharasnadi Quath'. These drugs have been used in a combined form in the study of the present series. We have used the product prepared by Alarsin, Bombay., named as 'R-COMPOUND' in tablet form.

### METHODS AND MATERIALS

We collected cases from the general pool of the outpatient department of our Hospital, during the last four years. A total number of 97 patients were treated by the indigenous drugs. These included 50 cases of Chronic Rheumatism which included 12 cases of Rheumatoid Arthritis, 20 cases of Spondylitis Ankylopoietica and 27 cases of Osteo-arthritis. The criteria of diagnosis consisted of clinical, E. S. R., Routine blood and radiological examinations.

The analysis of types of the cases studied is given in **TABLE I**

Types of cases	No of Cases
Rheumatoid group of diseases	50
Spondylitis ankylopoietica	20
Osteo – arthritis	27
<b>Total</b>	<b>97</b>

\*Includes 19 cases of established Rheumatoid arthritis

**TABLE II**  
**Age distribution of Rheumatoid group of diseases**

Age in years	Number of cases	Percentage
0-10	3	6%
10-20	9 (including 3 cases of E.D.R.A)	18%
20-30	13 (including 7 cases of E.D.R.A)	26%
30-40	17(including 2 cases of E.D.R.A)	34%
40-50	6	12%
Above 50	2	4%

\*E.D.R.A = Established Diagnosis of Rheumatoid Arthritis

**TABLE III**  
**Age Distribution of spondylitis ankylopoetica**

Age in years	Number of cases	Percentage
0-10	Nil	0%
10-20	3	15%
20-30	9	45%
30-40	6	30%
40-50 & above	2	10%

**TABLE IV**  
**Age Distribution of Osteo-arthritis**

Age in years	Number of cases	Percentage
0-20	Nil	0%
20-30	2	8%
30-40	5	19%
40-50	8	30%
50-60	11	40%
Above 60	1	3%

**TABLE V**  
**Site of lesions in Osteo-arthritis**

Site of lesion	Number of cases
Hip joint	7
Dorso lumbar region	6
Knee joint	5
Sacrojliac joints	5
Shoulder	4

**TABLE VI**  
**The gradation of the cases of Rheumatoid arthritis,**  
**according to American Rheumatism Association**

Grade	No of cases	Percentage
Early (no structural change)	28	56%
Moderate (minor structural change)	14 (4 E.D.R.A)	28%
Severe (major structural changes)	6 (all E.D.R.A)	12%
Terminal (major structural changes plus ankylosis)	2 (all E.D.R.A)	4%

### DOSAGE & DURATION OF THE TREATMENT

The drug was used in tablet form. No attempt was made to analyse the drug. In cases of Rheumatoid group of diseases and spondylitis ankylopoietica, two tablets were given three times a day for first 2 weeks. The drug was continued thereafter as 1 tablet given thrice daily for 6 weeks. After a gap the course was repeated at intervals of 3 months to a total period of 1 year. In cases of Osteo-arthritis, a slightly different routine was followed. Two tablets were given three times a day for 8 weeks followed by one tablet 3 times a day for 3 months. Thereafter 1 tablet was given twice a day as a maintenance dose for 3 to 6 months.

In 63 cases, the drug was well tolerated with a dose of 6 tablets a day. Rest of them showed symptom of intolerance. 13 more of them could carry on the treatment with a dose reduction to 4 tablets a day. In rest of the 2 cases, the symptoms persisted inspite of the reduced dose and the therapy had to be discontinued. Besides drug treatment, the patients were given anti-anaemic treatment, physiotherapy and foci of infection were eradicated.

### RESPONSE

The cases were followed at regular intervals and each case was re-assessed after the expiry of one year of continued therapy.

The criteria included patient's subjective symptoms, clinical findings such as improvement in the range of painless movement, improvement in the blood picture of anaemia and E.S.R.

The grading of response was as follows :-

- I. Complete remission.
- II. Major improvement.
- III. Minor improvement.
- IV. No improvement.

The Drug showed improvement in 72 hours and during this period, various pain relieving substances were used. In general, however, the drug seemed to tranquilise the patient. In some cases, this effect was more marked and drowsiness of sleepiness followed.

In such cases the dosage was reduced. An improvement in appetite was noticed within a week. There was a fall in E.S.R. in those cases which showed good response. But even in clinically improved cases significant radiological improvement was not present. Following tables depict the response in respective diseases

**TABLE VII**  
**Response in Rheumatoid group of diseases**

Grade of Disease	Total Cases	Complete remission number(%)	Major remission number	Minor improvement number	No change number	Intolerance number
<u>I</u>	28	19(67%)	4(14%)	1(3.5%)	1(3.5%)	3(12%)
<u>II</u>	14	4(29%)	2(14%)	4(29%)	2(14%)	2(14%)
<u>III</u>	6	0(0%)	0(0%)	4(60%)	2(40%)	0(0%)
<u>IV</u>	2	0(0%)	0(0%)	0(0%)	2(100%)	0(0%)

Note : Underlined cases were of Rheumatoid arthritis

**TABLE VIII**  
**Response in Spondylitis ankylopoetica**

Response	Number of cases	Percentage
Complete remission	2	10%
Major improvement	8	40%
Minor improvement	4	20%
No Improvement	3	15%
Intolerance	3	15%

**TABLE IX**  
**Response in Osteo-arthritis**

Response	Number of cases	Percentage
Complete remission	2	8%
Major improvement	7	26%
Minor improvement	9	33%
No Improvement	6	22%
Intolerance	3	11%

### Side Effects

The side effects due to the administration of the drug were noticed in good number of the cases studied. The analysis of the various reactions and the number of the patients is given in the table below

**TABLE X**

S N	Symptom	No of cases
I	Persistent giddiness and restlessness	11
II	Slight giddiness and restlessness	13
III	Drowsiness	14
IV	Constipation	19
V	Diarrhoea	2

\* Note : Improved after reduction of the dose

## DISCUSSION

When the subject of arthritis and chronic rheumatism was last reviewed by Bauser and Ropes the comment was made that factors influencing the course of these diseases for better or worse were only beginning to be appreciated and that true curative therapy is not certainly at hand.

The treatment of rheumatoid group of diseases has remained eminently unsatisfactory. The pyreto therapy non-specific protein therapy and the gold therapy has been used from time to time with good results but not without anxious moments for the treating physician.

When corticoids were introduced it seemed that the final answer was at hand. They have not proved as valuable in long term as first experience seemed to suggest. Suppression occurs in majority of the cases but relapses invariably follow the withdrawal. Despite the findings of the Medical Research Council and Nuffield Foundation joint committee on 'Long term results, in cases treated with cortisone and aspirin,' there appeared to be no significant advantage in employing cortisone therapy. Thus the clinicians have come to conclusion of resorting to other methods which may have lasting results.

Many Rheumatologists continue to use and report favourably upon gold for the long term treatment of Rheumatoid arthritis (Freyberg, 1957). In many cases, gold helps to reduce activity and many clinicians have advocated its continued use.

Phenyl butazone has now established a place as an analgesic in the symptomatic treatment of Rheumatoid arthritis, spondylitis and osteoarthritis. Bauer has emphasized its value in spondylitis. Its toxicity is now well known in larger doses and it is not so well tolerated in small doses at times.

Chloroquine in Rheumatoid arthritis is also under a trial.

## VIVISECTION OF OUR RESULTS

From table 7, we can make out that out of 50 cases of Rheumatoid type of arthritis, 28 cases which were placed in grade 1 of the disease showed better response, as much as 67% showed complete remission. None of these cases was of actual Rheumatoid Arthritis. In the II group of 14 cases (Grade II), only 29 percent showed complete remission of these 4 cases were of established rheumatoid arthritis. All of them showed minor improvement. In grade III & IV of the diseases only 4 cases of group III showed minor improvement while there was no improvement in grade IV of the disease. Thus, out of 12 cases of rheumatoid arthritis 4 cases had no response while 8 cases had only minor improvement.

Bansod has reported good results in 2 cases of Rheumatoid diseases, while Kaikini (1953) has reported still better results in 25 cases of Rheumatoid arthritis. Our results tally with the findings of Variava (1954) who reported only slight improvement in 3 out of 5 cases. Rather our results are slightly better.

Similarly in spondylitis ankylopoietica there was complete remission only in 10% of the cases; there was a major improvement in 40% of the cases, while in rest of cases the result was poor.

In cases of Osteo-arthritis, the figure is still more gloomy, while there was complete remission only in 8% of cases and there had been major remission only in 20% of cases and minor remission in 30% of cases. Variava has also reported good response in 27% of cases and slight improvement in 15% of cases.

As far as toxicity of the drug is concerned, the table no X has shown that in most of the cases, there were slight toxic reactions but the drug was tolerated quite well. Only in group I there was persistant signs and symptoms while in other group of cases, the side reactions were either of lesser magnitude or they disappeared after reduction of the dose of the drug.

On the whole only 11 out of 97 patients did not tolerate the drug and the therapy had to be discontinued. This is quite a low figure; when we compare with the toxicity of other drugs; such as cortisone, phynel, butazone and chloraquine etc.

Although the results of the treatment by indigenous drugs are by no means ideal but they seem to be of not a lesser value. In very advanced cases they do not seem to succeed but in early cases they extend a hope. Particularly for a long term treatment these drugs may be the drug of choice.

All this, does not discourage us but it gives us a hope for a future. It is likely that by further analysis, we may be able to find a more active ingredient in the drug for the treatment of chronic painful joint lesions.

### SUMMARY

1. 97 cases were studied which included cases of Chronic Rheumatism, Rheumatoid arthritis, spondylitis ankylopoetica and Osteo-arthritis.
2. Indigenous drugs, in the form of "R. COM-POUND" were used.
3. The results were satisfactory, particularly in early cases. The side reactions were few.
4. It is suggested that further analytical and clinical research be carried out to find the active ingredients.

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