EFFICACY OF HOMOEOPATHY USING CLARKE'S CLINICAL REPERTORY IN CASES OF RHEUMATOID ARTHRITIS BY TESTING THE INDICATED MEDICINES ; FERRUM PICRICUM, METHYLENE BLUE, SALICYLIC ACID, IN GIVEN RELATED CLINICAL RUBRIC: A CLINICAL STUDY

Dr Anjali Thakur — Associate Professor Department Of Homoeopathic Repertory Sriganganagar Homoeopathic Medical College.

ABSTRACT

Background-Rheumatoid arthritis is a miscellaneous and diversified disease, which established on causative factors i.e. combining genetic risk factors and antibodies, sub-classified into sero-positive and sero -negative RA. Positive ACPA and positive RF with rising CRP-levels in mostly patients occurs years before the starting of clinical symptoms indicate that compatible immunity start to develop very early for RA . **Aim and objectives:** To assess improvement in the cases of RA using rare homeopathic medicine ; *Ferrum picrum, Methylene blue, Salicylic acid* on the basis of *ACR response/2010/EULAR Diagnostic Criteria for Rheumatoid Arthritis* which measures percentage improvement from baseline on the basis of joint involvement score , RA Factor , CRP value, ACPA value , ESR value and symptomatic changes.

Material and methods: Case Definition -Patient having the symptoms of Rheumatoid Arthritis considered on the basis of clinical presentations, a complete history taking, clinical examinations and lab investigations with no complications, case as per *International Classification of Disease-10-CM Diagnostic Code M06.9.* Study area - The work has been done at *Sri Ganganagar Homoeopathic Medical College, Hospital And Post Graduate Research Centre, Rajasthan,* India, Out Patient Department(Opd), In Patient Department(Ipd) And Peripheral Centres Sample size- *30 cases selected for each of 3 medicines (total 90)* to be tested in proposed research by Random Sampling Method and each medicines will be serially tested in consecutive selected cases. **Study Design-** Each sign and symptoms of patients noted as per directions given by Dr. Samuel Hahnemann in Organon Of Medicine(6th Edition). Every case will be represented according to the guidelines given in the Standardized Case Record. Symptoms and signs analyzed as per chronic disease by Dr. Samuel F. Hahnemann, totality would be erected and suitable remedy ; among the three remedies in Clarke's Clinical Repertory given in clinical rubric- Rheumatoid Arthritis, administered.Base line investigations done in each case were clinical criteria –(early morning stiffness, joint tenderness, joint swelling,) serological test, acute phase response (*ESR, CRP, RF, ANTI-CCP*).

Statistical analysis - the stastical tool *PAIRED T TEST* has been used for my research study. There is no comparative study, this was a prospective and clinical study .analysis result was done with the help of Microsoft excel 2016, graph pad and calculator. **Results:** Three Homoeopathic drugs mentioned in Clarkes Repertory under clinical rubric Rheumatoid Arthritis were found to reduce joint involvement in 90 patients with RA; t value=19.0547, P<.001 (for ferrum pic; n=30, paired t value = 8.86, for methylene blue; n=30, paired t value = 13.87, for salicylic acid;n=30, t=15.33; P < 0.001). The 2010 ACR/EULAR Diagnostic score reduced in all 90 patients t=22.38063; P < 0.001 (30 patients for ferrum pic t= 11.32, 30 patients for methylene blue t= 14.05,30 patients for salicylic acid t= 13.05; P < 0.001). Mean ESR improved to 18.51 from 29.11 (t = 20.10144, P < 0.05). Out of 90, 31 (34.44%) patients were found to be Sero-negative after given three Homoeopathic drug- Ferrum Picricum, Methylene Blue And Salicylic Acid. Psora- Sycosis is the dominant miasm mostly found among 90 Rheumatic Arthritis patients. **Conclusion-** In my study i.e.“Efficacy of Homoeopathy using Clarke's Clinical Repertory in cases of Rheumatoid Arthritis by testing the indicated medicines in given related Clinical Rubric”; the foregone conclusion of my study satisfied my research hypothesis so remarkably when we studied the cases after 6 month of treatment and drugs given.

KEYWORDS : Rheumatoid Arthritis, Clinical Rubrics, Clinical Repertory, Indicated Medicines, Homoeopathy

INTRODUCTION :

Rheumatoid arthritis is emerged from the Greek term $\square\varepsilon\acute{\upsilon}\mu\alpha$-*rheuma (nom.), ῥεύματος-rheumatos (gen.)*. At the end of the term -*oid* gives the meaning as *joints inflammation that seems to similar as rheumatic fever*. Rhuma which means watery ooze might refer to the fact that the swelling in joints or that the disease may be made worse by wet weather. The initial earliest fundamental traces of arthritis occur before at 4500 BC. A symptom very similar to rheumatoid arthritis is first ever describes in a text dated 123 AD.

The French **physician Dr Augustin Jacob Landré-Beauvais** (1772–1840) gave first description recognized as RA in modern medicine was in 1800 who was based in the famous Hospital in Paris. In 1859 The name "Rheumatoid Arthritis" itself was invented by British Rheumatologist **Dr Alfred Baring Garrod.** Rheumatoid arthritis is a miscellaneous and diversified disease, which established on causative factors i.e.combining genetic factors and antibodies, and it's classified into sero-positive and sero -negative RA. Positive ACPA and positive RF with rising CRP-levels in mostly patients occurs years before the starting of clinical symptoms indicate that sufficient immunity start to develop very early for RA. ACPA are very important criteria for RA diagnosis, whereas RF can also be found among healthy (elderly) individuals and patients with other inflammatory disease/infection. Joint involvement (pain , stiffness, inflammation) in RA mostly occurs symmetrically. The critical stage of RA can incline to other complexities all over the body and may lead to bone deformity which causes disability. For RA classification criteria that were given by the American College of Rheumatology and the European League Against Rheumatism in 2010 accentuated for early detection of RA so that required management can be started before any pathological changes or bony deformities becomes irreversible.The main aim of treatment are to lessen pain, lowering down the swelling, maintaining quality of life and to upgrading patient's physical, emotional and entire well being. Homoeopathic approach of treatment can help to handle the complcations and may restore the healthy well being which is based on certain laws and principles. Homeopathy, a common form of alternative medicine is used world wide and plays a major role in healing different diseases. Due to minimal side effects homeopathic remedies may serve as potential method of treatment and in the management of RA.

Aim :

Efficacy of Homoeopathy using Clarke's Clinical Repertory in cases of Rheumatoid Arthritis by testing the indicated medicines in given related Clinical Rubric: A Clinical Study.

Objectives :

Primary Objectives-(i)To evaluate merits of Clarke's Clinical Repertory in treatment of cases of Rheumatoid Arthritis.(ii).-To know the efficacy of homoeopathic medicine- Ferrum pic, Methylene blue and Salicylic acid in the management and treatment of Rheumatoid Arthritis mentioned in Clarke's Repertory

SECONDARY OBJECTIVES-

To assess improvement in the cases of RA using above mentioned homeopathic medicine on the basis of ACR response/2010/EULAR Diagnostic Criteria for RA which measures percentage improvement from baseline on the basis of joint involvement score , RA Factor , CRP value, ACPA value , ESR value and symptomatic changes .

STUDY ANALYSIS-

During my research study 90 patients were selected of 120 patients on the basis of inclusion and exclusion criteria mentioned in methodology. 90 patients out of 120 were excluded during the screening procedure.
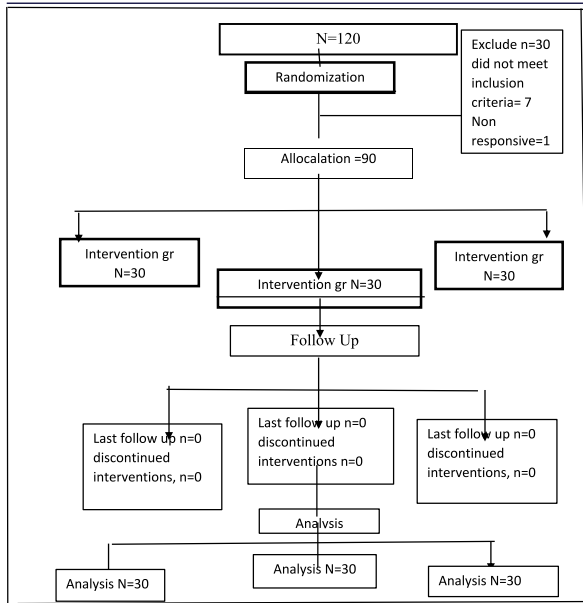
1- total 90(n), in 30 patients which receives FERRUM PICRICUM show changes in
joint involvement score (Mean±SD) 2.733±0.9802 to 0.5160±0.7183
RA FACTOR 23.23±6.84 to 15.13±5.73 IU/mL
CRP VALUE 33±6.96 to 16.76±7.72 mg/L
ACCP 39.33±10.99 to 22.2±9.67 EU/mL
ESR 30.96±8.97 to 19.7±6.20 mm/hour

Figure no-16 - Study flow chart
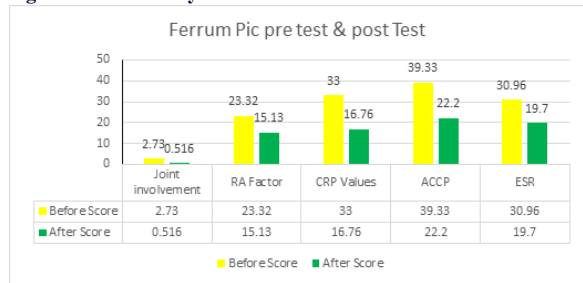
2- Another 30 which receives METHYLENE BLUE show changes in
joint involvement score (Mean±SD) 2.93±1.04 to 1.5±0.73
RA FACTOR 25.5±8.19 to 14.9±6.96 IU/mL
CRP VALUE 24.43±12.47 to 15.11±8.37 mg/L
ACCP 35.89±11.79 to 20.71± 9.89 EU/mL
ESR 30.28±9.82 to 20.26±7.08 mm/hour

Figure no.- 17- Bar diagram: Score of Ferrum Picricum Joint involvement, RA factor, CRP Values, ACCP, ESR (pre test & post test) in 30 patients.
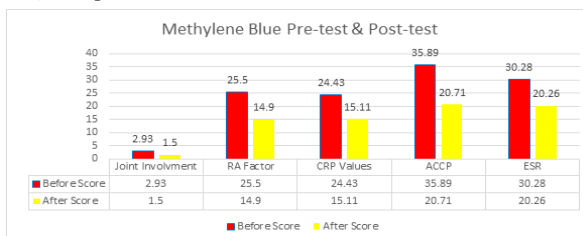
3- Another 30 which receives SALICYLIC ACID show changes in joint involvement score (Mean±SD)
2.7 ± 0.91 to 1.3 ± 0.80
RA FACTOR 23.63 ± 5.04 to 14.16 ± 4.21 IU/mL
CRP VALUE 27.2 ± 11.1 to 15.65 ±7.51 mg/L
ACCP 32.67± 10.88 to 20.12 ± 8.23 EU/mL
ESR 29.13 ± 6.97 to 18.6 ± 5.66 mm/hour

Figure -19- Bar diagram: Score of methylene blue Joint involvement, RA factor, CRP Values, ACCP, ESR (pre test & post test) in 30 patients.
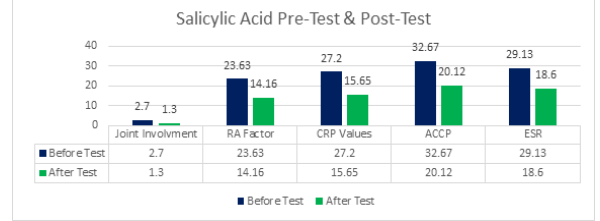
7.1.3. figure-20- Bar diagram: Post test comparison of three medicinal group with respect to joint involved, RF, CRP, ACCP, ESR
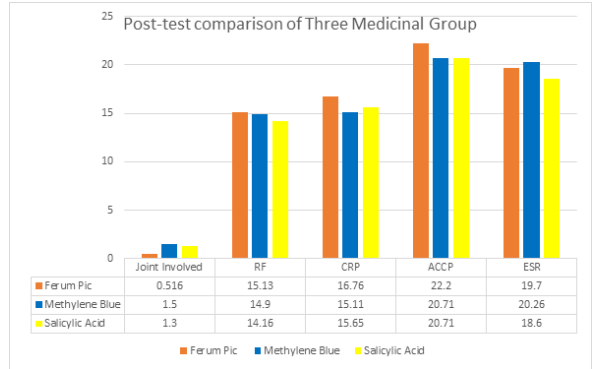
Table-08 Table showing distribution of result of All Cases

RESULT	Improved	Recovered	Not Improved	Total
No. of cases	40	36	14	90
Percentage of cases	44.44%	40%	15.56%	100%

Observation
Sociodemographic Profile of the Patients In my study mean age of the rheumatoid arthritis patient was 41.11±9.67 YRS (Mean ± SD), The maximum number of cases from age group 40-50 years (35.56%) during my study rheumatoid arthritis patient was common in female patient (n=51, 56.66%) than the male patients (n=39, 43.34%). Rheumatoid arthritis patient's prevalence is equal in rural area (n=45, 50%) and urban area (n=45, 50%).

Table -01 -Sociodemographic profile

Characteristic	Number			Total	Percentage	Mean± Deviation
	FP	MB	SA			
Sex Distribution						
Female	15	16	20	51	56.66%	
Male	15	14	10	39	43.34%	
Age Distribution In Years						
20-30	4	7	2	13	14.44%	
30-40	7	10	10	27	30%	41.11±9.67
40-50	13	8	11	32	35.56%	
50-60	5	5	7	18	20.00%	

TOTAL	30	30	30	90	
Habitat					
Rural	17	14	15	46	50%
Urban	13	18	15	46	50%

STASTICALANALYSIS-

Pre and Post Treatment Analysis (Use of paired t – test) Joint involvement score pre (before treatment) and post (after 6 months) assessment of three groups: FP group which receives ferrum pic show changes in joint involvement score (Mean±SD) 2.733±0.9802 to 0.5160±0.7183 , MB group which receives methylene blue shows changes in joint involvement score (Mean±SD) 2.93±1.04 to 1.5±0.73 and SA group which receives methylene blue shows changes in joint involvement score (Mean±SD) 2.7 ± 0.91 to 1.3 ± 0.80.

Table-02--Joint involvement score pre (before treatment) and post (after 6 months) assessement of three groups:

	FP		MB		SA	
S. No.	Before Treatment	After Treatment	Before Treatment	After Treatment	Before Treatment	After Treatment
1	5	0	3	1	2	1
2	3	2	5	3	2	1
3	5	3	2	1	2	1
4	3	2	3	2	3	2
5	3	1	3	2	2	1
6	2	1	5	3	2	1
7	3	0	2	1	5	3
8	2	0	3	2	3	2
9	1	1	2	1	2	1
10	3	3	3	2	3	2
11	2	0	2	1	3	2
12	3	1	2	1	2	0
13	2	1	5	3	3	1
14	2	1	3	2	2	1
15	2	1	5	3	2	1
16	3	1	2	1	2	1
17	3	1	2	1	3	2
18	3	1	3	1	3	2
19	2	1	3	2	3	2
20	3	1	3	1	5	3
21	2	1	3	1	5	3
22	2	1	2	1	3	1
23	3	1	5	2	3	1
24	3	1	2	1	2	0
25	1	1	3	1	2	0
26	5	1	2	1	2	1
27	2	0	2	1	2	1
28	3	1	2	1	3	1
29	3	1	3	1	3	1
30	3	1	3	1	2	1

RA factor pre (before treatment) and post (after 6 months) assessment of three groups

FP group which receives ferrum pic show changes in RF score (Mean±SD) 23.23±6.84 to 15.13 ± 5.73, MB group which receives methylene blue shows changes in RF score (Mean±SD) 25.5 ± 8.19 to 14.9 ± 6.96 and SA group which receives methylene blue shows changes in joint involvement score (Mean±SD) 23.63 ± 5.04 to 14.16 ± 4.21.

Table -03 RA factor pre (before treatment) and post (after 6 months) assessement of three groups

	FP		MB		SA	
S. No.	Before Treatment	After Treatment	Before Treatment	After Treatment	Before Treatment	After Treatment
i)	28	19	15	10	32	22
ii)	32	21	20	14	20	14
iii)	38	27	35	24	16	11
iv)	36	25	28	19	18	13
v)	22	15	40	28	20	14
vi)	17	12	38	26	25	17
Vii)	19	13	32	22	28	19
viii)	20	14	26	18	22	15
ix)	36	24	14	10	27	18
x)	22	15	17	11	20	14
xi)	18	13	22	15	22	15
xii)	20	13	23	16	22	15
xiii)	21	15	22	15	18	13
xiv)	15	6	20	14	32	22
xv)	13	13	39	27	24	16
xvi)	12	12	42	29	28	19
xvii)	17	7	36	25	30	21
xviii)	19	6	24	10	24	16
xix)	20	20	22	8	22	13
xx)	22	20	18	7	34	20
xxi)	24	10	27	11	20	12
Xxii	26	11	15	6	18	10
Xxiii	20	20	18	7	19	8
Xxiv	18	10	24	8	22	10
Xxv	19	9	36	12	28	11
Xxvi	32	10	29	10	34	13
Xxvii	30	12	24	8	20	8
Xxviii	28	20	19	12	22	8
Xxix	28	19	20	13	22	8
Xxx	25	23	20	12	20	10

CRP pre (before treatment) and post (after 6 months) assessement of three groups:

FP group which receives ferrum pic show changes in CRP value (Mean±SD) 33.00±6.96 to 16.76±7.72 , MB group which receives methylene blue shows changes in CRP value (Mean±SD) 24.43±12.47 to 15.11±8.37 and SA group which receives methylene blue shows changes in CRP value (Mean±SD) 27.2 ± 11.1 to 15.65 ± 7.51.

Table 04-CRP pre (before treatment) and post (after 6 months) assessement of 3 groups:

	FP		MB		SA	
S.NO.	PRE TEST	POST TEST	PRE	POST	PRE	POST
1	20	14	39	27	12	4.8
2	30	21	29	20	20	8
3	35	24	13	9	28	11.2
4	45	31	16	11	45	18
5	48	34	10	7	42	16.8
6	32	22	12	8	30	12
7	30	20	15	10	18	7.2
8	22	14	30	21	25	16.2
9	38	25	40	28	19	12.3
10	30	10	25	17.5	30	10.5
11	32	20	22	15	33	11.5
12	42	30	18	13	40	14
13	44	13	19	13	22	13.2
14	36	12	17	8	26	15.6
15	40	14	12	5	11	11
16	32	10	29	12	16.5	10
17	28	10	32	13	18.9	11.3
18	28	10	49	20	19.3	14
19	32	30	18	7	25	17.5
20	28	25	15	6	48.1	33.6
21	40	10	10	3	37.4	26.2
22	34	10	52	21	20.2	14.4
23	20	20	46	40	17.9	12.5
24	26	10	40	28	23	16
25	34	8	36	22	17	11.9
26	28	10	29	20	16.8	11.8
27	30	12	10	10	23	16
28	32	12	12	10	36	25
29	34	12	18	11	47	32.9
30	40	10	20	18	49	34.3

ACCP pre (before treatment) and post (after 6 months) assessement of three groups:

FP group which receives ferrum pic show changes in ACCP value (Mean±SD) 39.33±10.99 to 22.2 ±9.67 , MB group which receives methylene blue shows changes in ACCP value (Mean±SD) 35.89±11.79 to 20.71±9.89 and SA group which receives methylene blue shows changes in ACCP value(Mean±SD)32.67±10.88to20.12 ± 8.23.

Table 05 ACCP pre (before treatment) and post (after 6 months) assessement of three groups:

S.NO.	FP		MB		SA	
	PRE TEST	POST TEST	PRE	POST	PRE	POST
1	45	32	37	25.9	47.5	33
2	49	35	48	33.6	35.4	24.7
3	30	21	62	43.4	28	19.6
4	35	25	25	17.5	30	21
5	28	20	53.5	37.4	29.9	21
6	58	40	29.1	20.3	42	29
7	39	28	38	26.6	22	15
8	27	19	21	14.7	40	28
9	48	34	60.5	42.3	32	22.4
10	52	37	42.1	30	20	14
11	60	42	45.5	31.8	25	17.5
12	56	40	37	25.9	37.8	26
13	34	14	27.5	19	25	17
14	32	10	31.1	21	22.5	16
15	46	10	40.8	16	55	38
16	27	20	23.4	10	20	14
17	57	17	44.2	17.6	18	12.6
18	33	12	21	8.5	46	32
19	36	10	19.5	8	38	23
20	40	16	41	16	33.5	20
21	42	23	46.7	19	38	23
22	38	17	23.8	10	43.5	26
23	29	22	26.3	10.5	59	35
24	35	12	49.5	29	44.5	18
25	53	21	22.3	14	24	10
26	44	22	29	18	24.5	10
27	20	20	34	20	28	12
28	25	22	38.7	13.5	29	10
29	30	12	33.2	12	20	8
30	32	13	26	10	22	8

26	23	20	30	21	20	15
27	17	15	46	30	23	14
28	19	19	48	32	34	22
29	25	10	39	27	32	23
30	20	20	27	15	32	13

ESR before treatment and after treatment (after 6 months) assessement of three groups:

FP group which receives ferrum pic show changes in ESR value (Mean±SD) 30.96 ± 8.97 to 19.7 ± 6.20 , MB group which receives methylene blue shows changes in ESR value (Mean±SD) 30.28±9.82 to 20.26± 7.08 and SA group which receives methylene blue shows changes in ESR value (Mean±SD) 29.13 ± 6.97 to 18.6 ± 5.66.

Table-06- ESR before treatment and after treatment (after 6 months) assessement of three groups

S.No.	FP		MB		SA	
	Pre Test	Post Test	Pre	Post	Pre	Post
1	22	15	24	17	27	19
2	28	19	28	20	32	23
3	40	28	30	21	25	17
4	38	26	22	15	22	15
5	19	13	27	19	29	29
6	24.5	17	36	25	33.5	23
7	30	21	46	32	38	26
8	38	24	48	33	46	32
9	48	34	36	25	30	21
10	43.5	30	21	15	27	19
11	40	25	24	17	29	17
12	28.5	20	38	26	31	22
13	35.5	25	35	24	30	20
14	39	27	42	29	39	27
15	46	18	20	8	22	9
16	42	17	21	10	24	10
17	39	27	18	12	32	13
18	37	15	15.5	10	20	20
19	32	10	18.5	11	17	16
20	27	11	40	19	20.5	18
21	31	11	26	20	19	15
22	30	13	23	20	36	11
23	20	20	19.5	13	38	15
24	22	20	24	17	29	12
25	25	21	36	25	37	22

RESULT

Age distribution In my study mean age of the Rheumatoid Arthritis patient was 41.11±9.67 YRS (Mean ± SD), The maximum number of cases from age group 40-50 years (35.56%) Sex distribution - during my study rheumatoid arthritis patient was common in female patient (n=51, 56.66%) than the male patients (n=39, 43.34%). It shows that rheumatoid arthritis is more common in female patients.

Habitat distribution -
In my study Rheumatoid Arthritis patient's prevalence is equal in rural area (n=45, 50%) and urban area (n=45, 50%).

In my study assessment done based upon the patient (general well being) , clinical –(early morning stiffness, joint tenderness, joint swelling,) and laboratory aspect (ESR, CRP, RF, ANTI-CCP).

A total of 90 participants (51 females, 39 males; mean age±SD 41.11±9.67 years) diagnosed with RA according to the American College of Rheumatology 2010 criteria, were included in the study. According to the population vital statistics (gender, age) and rheumatoid arthritis disease sign and symptoms (duration of disease, morning stiffness, any deformity) of the participants were recorded. The period of this ongoing study was from 2018-2021. Out of 90 cases RA factor become normalized in 38 (42.22%) .The period of treatment varied from case to case with significant amelioration of symptoms in majority of cases. Sero positive RA cases converted to be seronegative RA with the help of homoeopathic approach based on certain fixed fundamental principles. 90 cases testing Sero- positive for RA at least four clinical sign were evaluated from SGNRHMC OPD from 2018-2021. Cases were analysed according to the Changes in The 2010 ACR/EULAR Diagnostic score, ESR, ACPA , RA factor and CRP value to find out the role of homoeopathic drug in people with RA.

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Three Homoeopathic drugs mentioned in Clarkes Repertory under clinical rubric Rheumatoid Arthritis were found to reduce joint involvement in 90 patients with RA; t value=19.0547, P<.001 (for ferrum pic; n=30, paired t value = 8.86, for methylene blue; n=30, paired t value = 13.87, for salicylic acid;n=30, t=15.33; P < 0.001). The 2010 ACR/EULAR Diagnostic score reduced in all 90 patients t=22.38063; P < 0.001 (30 patients for ferrum pic t= 11.32, 30 patients for methylene blue t= 14.05,30 patients for salicylic acid t= 13.05; P < 0.001). Mean ESR improved to 18.51 from 29.11 (t = 20.10144, P < 0.05). Out of 90, 31 (34.44%) patients were found to be Sero-negative after given three Homoeopathic drug- Ferrum Picrum, Methylene Blue And Salicylic Acid. Psora- Sycosis is the dominant miasm mostly found among 90 Rheumatic Arthritis patients.

CONCLUSION

In India recent projection indicates that there is an alarming rise in prevalence of RA. In modern medicine there is no satisfactory effective therapy to cure RA. Prolonged disease –modifying antirheumatic drugs (DMARD) medicines can produce a series of side effects.

In my research study after stastical analysis and the proper follow ups of all 90 cases the effects of three indicated medicines i.e. ferrum picrium, methylene blue, salicylic acid gives almost equal effects on the patients suffering from seropositive RA which satisfies my research hypothesis. Homeopathy not able to reversed the bony deformity but surely improves the well being and general quality of life, normalizes the RF value.In my study i.e."Efficacy of

Homoeopathy using Clarke's Clinical Repertory in cases of Rheumatoid Arthritis by testing the indicated medicines in given related Clinical Rubric"; the end result is highly remarkable when we study before and after treatment(i.e. after 6 months) of RA diagnosed cases, there is significant changes in the symptoms of Rheumatic Arthritis, all three medicines shows lowering the intensity and severity of symptoms associated with Rheumatoid Arthritis. Homoeopathy, a common form of alternative medicine is used world wide and plays a major role in healing different diseases. Due to minimal side effects homeopathic remedies may serve as potential method of treatment and in the management of RA. Any impairment and aberration in joints or bones can never be restored or reversed by homoeopathic management but surely works on the boosting the health , walfare and general quality of life , stabilized the value found in laboratory assessment (ESR, CRP, RF, ACPA). Homoeopathic medicines ameliorates the severity and intensity of sign and symptom of RA. Falling off the value of the joint involvement score, reconcile the CRP value, transferring from seropositive to Sero negative RA, .thus maintaining the general quality of life and boost the overall health of diseasesd person.

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