

JOINT PAINS

Joint Pains are mainly or three types. One is Rheumatoid Arthritis in which R.A. Factor is + ve, in blood, where as in Gout, uric acid level is raised. Out of 10 cases of Joint pains nine are of Osteoarthritis. A research formulation on such cases with herbometalic combination show definite results.

निर्गुणडी	Vitex Nirgundi
नागरमोथा	Cyperus Rotundus
हारश्रृंगार	Nyctenthes Arbartristis
चोप चीनी	Simlex China
निर्विर्षी	Delphinium Denudatum
अश्वगन्धा	Withenia Somnifera

are given alongwith other Herbometalic combination (वातारि रस) – & (वातविधवंशक रस 1 BD) given for one year in Rheumatoid Arthritis, in gout for 3 months and in Osteoarthritis for 6 months have definite results. Here we shall mention clinical studies mainly on Rheumatiod Arthritis (आमवात)

MANAGEMENT JOINT PAINS WITH SOME AYURVEDIC FORMULATION: A CLINICAL EVALUATION

A clinical trial with herbo-mineral Combination (वातारि रस) & (वातविध्वंसक रस) with

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given as Decocotion (काढा) for 1 year was carried out in 150 cases of Amavata (rheumatid-arthritis). The results seem encouraging as it is found that out of 97 cases who completed the course of treatment, 39 (40.02%) had good response (75%and above relief), and (30.92%) fair response (50%-74 relief).

In this present scenerio the treatment With above combination represents an Alternative method of treatment for the Disease which till now has eluded Better solution. Here an attempt mode Of action of the drugs based on Ayurvedic pharmaco-dynamic principles.

Introduction

The nomenclature Amavata which has been derived from two terms Ama and Vata seems to have been evolved Around 9th century by Madhav based Upon the opinion of earlier authors. Primarily, in one context simply a term Amavata finds mention in Caraka Samahita, which is controversial as in Some books it had been mentioned as Addhyavata. Charaka describes, Ama In reference to certain digestive Disorders. Furthering one step ahead, Susruta put forth the concept of Ama Producing pain at a localised spot, Manifesting the features of Ama and Also of involved Doshas. This, According to commentator of Madhu-Kosha on Masdhav Nindana, is nothing But the description of Amavata.Subsequently, Vagbhata adds that the Doshas and Dushyas if

involved with Ama and engender disease, then the Same will be termed as Sama. Thereafter, Madhay described it as a Separate disease entity and mentioned Its aetiopathogenesis, clinical feathures And prognosis. Since then various Authors have innovated a number of Herbal or herbo-mineral formulations As well as purificatory measures of the Treatment of this disease.

The disease has been correlated with Rheumatioid arthritis in modern Parlance, the cause of which has not Been yet established. As such, besides Some short acting anti-inflammatory Drugs or immuno-suppressive drugs With hazardous side effects, there is no Medicine for its radical cure. In recent Past, trials of several therapies have Been reported mostly with the Hetuvyadhiviparita drugs like sunthi Guggulu (Prem Kishore, et.al., 1978) Sunthi Guduchi (Prem Kishore, et.al., 1980), Vatagajankush Ras, Maharasnadhi Kwath & Yogaraj Guggulu, Amavatari Ras, Maharasnadhi Kwath (prem Kishore & Padhi, 1987), Yogaraj Guggulu, Rasonadi Kwath (Prem Kishore and Banerjee, 1988), and pancakarma Treatment consisting of Snehana, Swedana, Virechana and Vasti (P.K.S. Nair, et al., 1992) etc. have been Reported to be significantly effective in Most of the cases.

As an alternative approach of Treatment, a clinical trial of 150 cases Combination (वातारि रस) & (वातविध्वंसक रस) with निर्गुणडी Vitex

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(rheumatoid-arthritis).

Materials and Methods

Criteria of selection :

1. Age between 12 to 60 years
2. sex either sex
3. Chronicity between 6 to 5 weeks
4. Morning stiffness
5. pain on motion or tenderness in at least one joint
6. Swelling of one joint
7. Swelling of at least one other joint
8. Symmetrical joint swelling
9. Subcutaneous Nodules over bony prominences
10. Typical roentgenographic changes which must show demineralization/degenerative changes
11. Positive test of rheumatoid factor in serum
12. synovial fluid a poor mucin clot with dilute acetic acid
13. synovial histopathology consistent with rheumatoid arthritis
14. Characteristic histopathology of rheumatoid nodules evidenced by biopsy

Criteria of exclusion

1. Age below 12 and above 60 years
2. Chronicity below 6 weeks or more than 5 years
3. Gout
4. Osteoarthritis
5. Tubercular arthritis
6. Gonorrhoeal arthritis
7. Arthritis with malignancy
8. Acute pyogenic arthritis
9. Psoriatic arthritis
10. Osteomyelitis
11. Rheumatic fever
12. Ankylosing spondylitis
13. Serious complications associated with any other systemic disease

Criteria for establishment of

Diagnosis. : The diagnosis was confirmed according to subjective/objective observations' as per proforma Prepared for the purpose.

Criteria of assessment of response of Therapy : A score system was evolved assigning points according to the involvement and severity of various findings which were recorded initially, periodically and at the end of the trial.

Criteria for assessment of Rheumatoid Arthritis Score

Subjective

Morning stiffness	points
Severe	06
Moderate	04
Mild	02
Nil	00

Pain on rest

Severe	09
Moderate	06
Mild	03
Nil	00

Objective

Pain in motion	
Severe	09
Moderate	06
Mild	03
Nil	00

Swelling

Severe	15
Moderate	10
Mild	05
Nil	00

Tenderness

G1	20
G2	15
G 3	10
G4	05
Nil	00

Muscle power

G0	10
G1	08
G2	06
G 3	04
G 4	02
G5	00

Restriction of joint movement

(of movable joints)	
Fully restricted	06
Partially restricted	03
No restriction	00

Subcutaneous nodule

Present	02
Nil	00

Functional Status

Grad	06
Grad	04
Grad	02
Grad	00

Fever

Present	02
Absent	00

Elevated E.S.R. (first hour)

71mm or more	06
41 mm 70 mm	04
20 mm 40 mm	02
> - 20 mm	00

Digestive impairment

(A) Constipation

Regularly	03
Frequently	02
Occasionaly	01
Nil	00

(B) Loss of appetite

Appetite lost	02
Appetite	01
Normal	00

(C) Anorexia

No inclination for Food	02
Lesser inclination For food	01
No anorexia	00

(D) Loss motion

Present	02
Absent	00

Classification of results

a. Good response

1. Presenting symptomatology of the disease as mentioned in the criteria for assessment.
2. Laboratory parameters inclined towards

normalcy.

b. fair response

1. 50% land above relief in presenting clinical symptom matology of the disease as percriteria of assessment. Significant improvement in laboratory parameters.

c. 25% and above reliev in presenting clinical symptom - atology as mentioned in the criteria for assessment.

2. Insignificant improvement in laboratory parameters.

d. No response

1. No relief in syumptomatology or otherwise.

e. Dropouts/LAMA :

1. Wilful discontinuation of the treatment during the trial.

2. Development of any serious complication.

3. Aggravation of the disease.

4. any pronounced toxicity of the drug.

Principal drug, dose, vehicle and duration of treatment वातारिस 1 BD 0----- 0 & वातविधवंशक रस 1 BD

Diet- mixed diet comprising of rice, pulse, vegetable curry and Chapati in lunch.

(a) Incidence of age : Obsevation regarding the incidence of age in Amavata patients revealed highest number of incidence i.e. 31 (22.14%) in the age group of 21 to 30 years. 27 (19.28%)cases in the age group of 11 to 20 years. 21 (15%) in the age group of 51 to 60 years while 9 (6.42%) cases were in the age group of 61 and above.

(b) Incidence of sex : Regarding the incidence of sex in the patients, it was higher than the number of females was higher than males, the proportion being 73 (52.14%) : 67 (47.85%) (Table-I)

(c) Chronicity : As regards the chronicity of illness highest number of patients i.e. 77(55%) had chronicity within 365 days

followed by 21(51%) cases having the chronicity between 366 to 731 days and equal number of 18 (12.85%) patients had the chronicity between 731 to 1095 days and above 1461 days while 6(4.28%) cases were in the chronicity of 1096 to 1460 days (Table II).

(d) Involvement of joint : Study of the incidence of joint involvement revealed the highest number of 96 (68.057%) cases affiliated with right knee joint followed by 92(65.71%) being afflicted with left knee joint. The other joints commonly involved were right ankle. Left MTP, I.P.T. of right hand, MTP joints of left hand, left ankle, right wrist. Elbow, left elbow, and wrist. (Table III).

(e) Presenting signs/symptoms : As regards presentation of clinical signs and symptoms swelling, pain, tenderness and morning stiffness were present in all the patients while 120 (85.71%) cases. Had restriction of joint movement, 107 (76.42%) cases had loss of appetite, 97 (69.28%) cases had constipation and 63 (45%) cases had anorexia. (Table IV).

Table 1
Age and sex of the patients

Age group (in years)	- sex		Total	per- centage
	male	female		
11 to 20	15	07	22	15.71
21 to 30	16	15	31	22.14
31 to 50	08	22	30	21.42
41 to 50	13	14	27	19.28
51 to 60	09	12	02	15.00
61 and above	06	03	09	6.42
Total	67 (47.85%)	73 (52.14%)	140 (100%)	(100%)

Table 2
Chronicity of the disease.

Chronicity (in days)	No. of patients	Percentage
With in 365	77	55
366 to 730	21	15
731 to 1095	18	12.85
1096 to 1460	06	4.28
1061 and above	18	12.85
Total	140	100

Table 3
Incidence of joint involvement

Joint involved	nos.of cases	(%)
Rt. Elbow	54	38.57
Lt. elbow	53	37.85
Rt. Wrist	54	38.57
Lt. wrist	53	37.85
Rt. MCP	66	47.14
Lt. MCP	70	50.00
Rt.TPF	68	48.57
Lt. TPF	57	40.71
Rt. Knee	96	68.57
Lt. Knee	92	65.71
Rt. Ankle	81	57.85
Lt. ankle	69	49.28
Rt. MTP	17	12.14
Lt. MTP	31	22.14
Rt.TPT	28	20.00
Lt.TPT32	32	22.85

Table 4
Incidence of clinical findings

Clinical	No. of cases	Percentage
Pain	140	100
Swelling	140	100
Tenderness	140	100
Restriction of Joint movement	120	85.71
Morning stiffness	140	100
Muscle weakness	65	46.42
Loss of appetite	107	46.42
Constipation	97	76.42
Anorexia	63	69.28
Loose motion	06	4.28
Subatanceous Nodules	01	0.7

Results : Observation on the therapeutic effect of the drug showed good

Response in 39 (27.85%) cases. Fair response in 30(21.42%) cases.

Poor response in 15 (10.71%) cases and no. Response in 3(2.14%) cases while 53 (37.85%) cases were drop outs (Table5)

Table 5
Results of treatment in the cases

Drug	Result of treatments					
	Good Resp.	Fair resp	Poor resp	No resp	Drop resp	Total out
Combination (वातारि रस) वातविध्वंसक रस & निर्गुण्डी Vitex Nirgundi नागरमोथा Cyperus Rotundus हारश्रृंगार Nyctenthes Arbartristis चोप चीनी Simlex China निर्विर्षी Delphinium Denudatum अश्वगन्धा Withenia Somnifera	39 (27.85%)	30 (21.42%)	15 (10.71%)	03 (12.14%)	53 (37.85%)	140 (100%)

Table 6
Significant variance in relation to age group

Results	Age groups (in years)						Total
	11-20	21-30	30-40	41-50	51-60	61-above	
Good response	08 (20.5%)	07 (17.9%)	08 (20.5%)	10 (25.6%)	05 (12.8%)	01 (2.05%)	39 (27.85%)
Fair response	06 (20%)	04 (13.3%)	5 (16.6%)	4 (13.3%)	10 (33.3%)	01 (3.33%)	30 (21.42%)
Poor response	01 (6.6%)	04 (26.6%)	05 (33.3%)	01 (6.6%)	02 (13.3%)	02 (13.3%)	15 (10.71%)
No response	00 (0%)	02 (66.6%)	00 (0%)	00 (0%)	01 (33.3%)	00 (0%)	03 (2.14%)
Drop out(0%)	07 (13.2%)	14 (26.4%)	12 (22.6%)	12 (22.6%)	03 (5.6%)	05 (9.4%)	53 (37.85%)
Total	22	31	30	27	21	09	140

The results in relation to sex indicate slightly more pronounced effect in case Of females as the percentage of good response and fair response in case of males being 26.86% and 19.40% respective. In case of females it was 28.76% and 23.28% (tabel7)

Table 7
Result in relation to sex

Result	Male	Female	Total
Good response	18(26.86%)	21(28.76%)	39(27.85%)
Fair response	13(19.40%)	17(23.28%)	30(21.42%)
Poor response	06(8.95%)	09(12.32%)	15(10.71%)
No response	02(2.98%)	01(1.36%)	03(2.1%)
Drop out	28(41.79%)	25(34.24%)	53(37.08%)
Total :	67(47.85%)	73(52.14%)	140(100%)

Total 8
Result in relation to chronicity

Result	Chronicity (in days)					Total
	0-365	366-730	731-1095	1096-1460	1461-Above	
Good response	21 (53.84%)	8 (20.5%)	6 (15.38%)	3 (7.69%)	1 (2.56%)	39 (27.85%)
Fair response	17 (56.66%)	3 (10%)	5 (16.66%)	2 (6.66%)	3 (10%)	30 (21.48%)
Poor response	7 (46.66%)	3 (20%)	2 (13.33%)	0	3 (20%)	15 (10.71%)
No response	2 (66.66%)	0	1 (33.33%)	0	0	3 (2.14%)
Drop response	30 (56.60%)	7 (15.9%)	4 (7.54%)	1 (1.88%)	11 (20.75%)	53 (37.85%)
Total	77 (55%)	21 (15%)	18 (12.85%)	6 (4.28%)	18 (12.85%)	140 (100%)

Discussion

Though according to modern medicine there is no specific cause which engenders the disease (rheumatoid arthritis), the concept of Ayurveda suggesting the production of ama or impaired metabolism invites the attention of researchers to combat the disease by eliminate this causative factor As such the treatment according to Ayurveda in addition to alleviation of disease it also aims at augmenting the process of digestion both at intestinal and cellular level.

Since in our study practically 97 cases

who completed the treatment, 39 (40.20%) cases had shown good response (relief of 75% and above) and 30(30.92%) cases had fair response i.e. relief between 50% to 74% the result can be ascribed as significant.

Besides an effort has been made to analyse the pharmacodynamic principles of different ingredients of the formulations which were used in the combination of Maha yogaraj Guggulu Vaiswanar churna and Simhanada Guggulu A total number of 35 ingredients exist out of which 27 were of plant origin while 8 were metals/minerals derivatives (Table 9)

Table 9
Ingredients included in the Trial drugs

Drugs	No. of ingredients
Herbal	27 (77.014%)
Mineral	08 (22.85%)
Total	35 (100%)

The analysis on the presence of Rasa revealed that these 35 drugs have 62 constituent Rasas out of which Katurasa dominates with 23(27.9%) followed by Tiktarasa being 16 (25.80%) and Kasayarasa being 10 (16.12%) 4(6.45%) and 3(4.83%) This indicates the combination may render destruction of Ama and promote Deepama of Agni.

The combination of drugs possess 89 constituent Gunas out of which Laghu Guna dominates with 25 (28.08%) followed by Ruksha being 17 (19.10%) which are contradictory to the properties of ama and kapha The properties like snigdha being 16.85% is also significant for alleviation of vata. Next to these lies Tikshna Guna being 11.23% which is likely to act as srotasodhan Other properties like Guru sita ushma sara sukshma and Pichhila also co exist to lesser extent.

The distribution of virya as happened in these 35 drugs are 35 in total Out of which ushma virya is predominant being 68.57% followed by Sita being 22.85% while Anushnasita was 8.57% this model seems to be potent Ama vata and kaphanasak and likely to alleviate the pain improve the circulation and reduce the stiffness of the joints by absorbing accumulated tissue fluid.

The vipaka of these 35 drugs also exist in a typical proportion as katu being 51.42% is likely to counteract the features of ama while madhura being 48.58% is the ideal end product of the drugs responsible for alleviation of vata.

The individual Dosis action of the drugs occur in the proportion of Vatahara

59.61%”, followed by kaphakara as 34.06% while pittahara action was only 5.76% as such this makes a significant model for reversal of the disease process attributed to Ama and vata.

The other individual actions of the drugs as enumerated in the compendiums of Ayurvedic materia medica are 38 in total out of which Dipana accounts 28.94% followed by vedanaamak /Sulahara 23.68 pachana and sothahara action both account for 18.42% while Amahara happens to be only 26.3% of proportion This model further corroborates the adaptability of this combination as both Hetuviparat and vyadhiviparia in case of Amavata.

Conclusion

A study was conducted on 150 clinical cases of amavata a comparable clinical entity of rheumatoid arthritis. herbo-mineral Combination (वातारि रस) & (वातविध्वंसक रस) with

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given as Decocotion (काढा) for 1 year was carried out in 150 cases of Amavata (rheumatoid-arthritis)

A large number of indigenous drugs coupled with innumerable claims of their varied use in alleviating the clinical condition amavata calls for scientific validation for their attributes Guggulu employed in the present clinical work.

A detailed ayurvedic pharmacological study in this regard reflected several interesting conclusion most of the ingredients of the herbo-mineral compound possess katurasa ushna he

virya katu and madhura vipaka vatrahara karmas responsible for the alleviation of vata pachana of ama which are the prime factor contributing to the pathogenesis of the disease.

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