

CLINICAL STUDY ON REACTIVE ARTHRITIS-A CASE STUDY

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ABSTRACT

Reactive arthritis is a seronegative arthritis and also an immune mediated arthritis which usually develops after a gastrointestinal or genito-urinary infection. Diagnosis of this disorder is mainly clinical and based on oligoarticular arthritis of larger joints developing within 2-4 weeks of the preceding infection. In Ayurveda there is no direct correlation of this disease, so it can be considered as *anukta vyadhi*. Considering the involvement of *dosa*, *dusya*, *agnidusti*, *srota* and *srotadusti* in the disease, an approach can be made to diagnose the disease with Ayurvedic principle of diagnosis. Keeping in view all these important points, use of some Ayurvedic formulations can show tremendous results in such cases. In the present study, a patient of reactive arthritis was diagnosed on the basis of Ayurvedic principle and treated accordingly and hence he got complete relief.

KEYWORDS: Reactive arthritis, gastrointestinal, genito-urinary, oligoarticular, *anukta vyadhi*, *dosa*, *dusya*, *agnidusti*, *srota*, *srotadusti*.

INTRODUCTION

Reactive arthritis is an inflammatory arthritis that manifests after several days or weeks after a gastrointestinal or genitourinary infection. Gastrointestinal infection caused by *Salmonella enteritidis*, *Shigella flexneri*, *S. dysenteriae*, *Yersinia enterocolitica* etc. Sometimes the incidence may be due to urogenital infection, mainly with *Chlamydia trachomatis*, *Neisseria gonorrhea*, *Mycoplasma hominis* are common.^[1]

A combination of genitourinary symptoms, metatarsophalangeal joint involvement, elevated C protein and positive HLA B-27 renders a 69% sensitivity and 93.5% specificity to the diagnosis of reactive arthritis.^[2]

In a population of 1.3 billion, with an incidence of 0.6-27/100000 in population based studies, a huge burden of reactive arthritis is expected in India.^[3]

The patient was having history of taking *viruddh aahar* and *ativyayam* as *nidan* and presenting symptoms like *Jwara*, *Sotha*, *Sarvangavedana*, *Stabdhata*, *Gourava*, *Alasya* and *Gurugatrata*.

So, looking into the *nidanas* and *rupa*, the disease was considered to be *anukta vyadhi* and cannot be compared to any disease mentioned in Ayurveda. Hence a proper *samprapti* was made for it and then treatment procedure was planned accordingly. And the patient was cured completely.

CASE REPORT: A male patient of 24 years old came to the OPD of *Roga nidan*, Govt Ayurvedic College and Hospital Assam with chief complaints of moderate grade of fever, severe pain and swelling over bilateral ankle joints as well as knee joints due to which he was unable to walk, stand and sit down.

On history taking, it was noted that he suffered from episodes of loose stool in the mid of May 2023. Then after having one whole day journey by car on 1st June he suffered from high grade of fever with mild pain over both feet and soles. Gradually his fever increased with pain and swelling over all joints of the body. He was diagnosed as reactive arthritis and treated under conventional system of medicine with strong antibiotic and steroid and he did not get complete relief of the disease. He got little improvement and joined his duty but again on 22nd June, his condition again worsened with same sign and symptoms. On 1st July his condition was such that he was unable to walk, sit down with swelling and stiffness over multiple joints and fever and admitted in Govt Ayurvedic College and Hospital on 1st July 2023.

On clinical examination, his BP was 110/70 mm Hg, P/R-90/min, Temp-101°F, non-pitting edema over both lower limbs and upper limbs, swelling and tenderness in multiple joints of his body. Locally there was redness, warm and tenderness over the joints on inspection and palpation. His laboratory investigations done on (20/6/23) were CRP = 154.83mg/L, RA =

20.56UL/ml, ASO titer = 162.07UL/ml, WBC = 11,350, widal test = positive, Dengue = negative, ESR = 110, ANA = negative.

From Ayurvedic perspective view of clinical examinations (*Trividh*, *Dasavidh* and *Astavidh pariksha*) following positive findings were found...

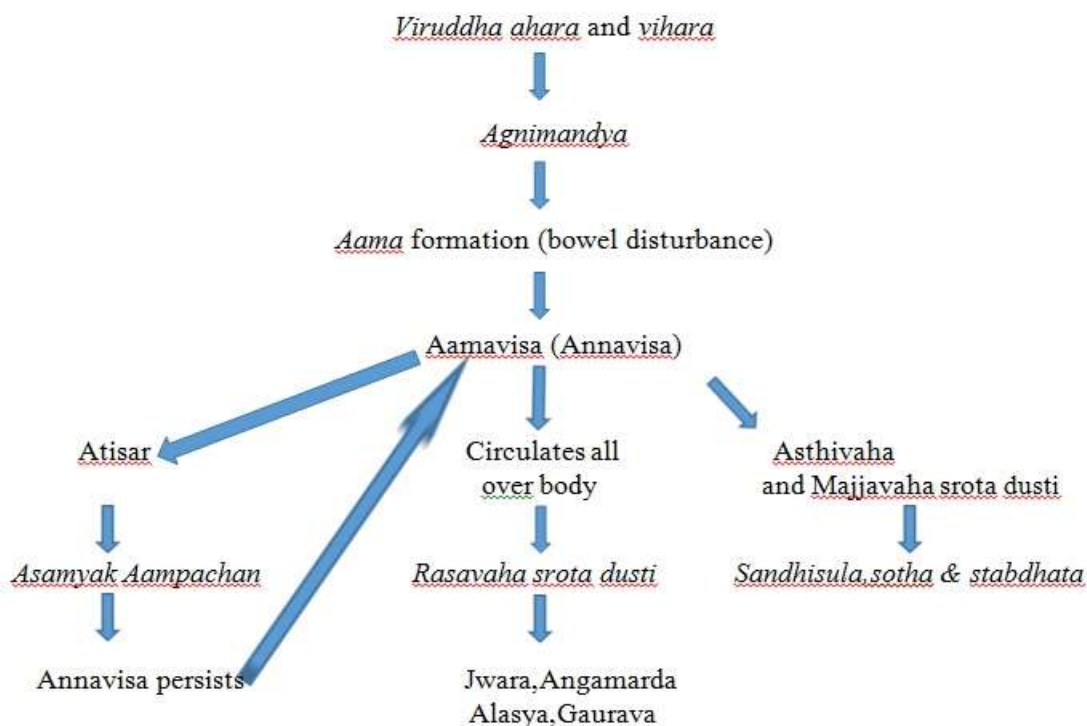
TRIVIDH PARIKSHA

1. On *prasna pariksha*: history of *viruddha aahar*, *agnimandya* and *ativyayam*.
2. On *darshana pariksha*: *sandhi sodha*, *stabdhata* in *sandhis*, *jwara*.
3. On *sparsana pariksha*: *ushna sparsa* in whole body and *sandhis* too.

DASAVIDH PARIKSHA AND ASTAVIDH PARIKSHA

We have found *nidana* of the disease as *viruddh aahara* and *ativyayama*, *agnisthiti* was *agnimandya*, involvement of *tridosas* (*vata*, *pitta*, *kapha*), *saamavastha* of the *sandhis* and the *vyadhikaala* was *asukari*.

From above clinical findings the following *samprapti* was postulated.



So, after the history and clinical examinations the following *samprapti ghatak* was attained for the disease.

Dosha: Tridosas (kapha and pitta Pradhan)

Dushya: Rasa, Asthi, Sandhi

Agni: Jatharagni and dhatwagni

Agnidusti: Mandagni

Srota: Rasavahasrota, Asthivahasrota, Majjavahasrota

Srotadusti: Sanga

Uddhavasthana: Amasaya

Sancharasthana: Sandhis and Sarvanga deha

Rogamarga: Madhyam rogamarga.

Finally the patient was admitted in the department of *Roganidan*, Govt Ayurvedic College and Hospital, Assam.

TREATMENT PROTOCOL: After developing a standard *samprapti ghatak* of the disease, he was treated according to the treatment principle of Ayurveda.

Table 01: Treatment protocol for first ten days.

Day	Treatment protocol	Ahara/Pathya/Medicine
1	<i>Langhan, Dipan, Pachan</i>	<i>Langhan: Laghu aahara</i> was adviced <i>Dipan: 2 pills</i> twice daily before meals
2		
3	<i>Aampachan at kostha and dhatugata level</i>	<i>Sanjivani vati,</i> 1 pill twice daily after meals <i>Tribhuvan Kirti Rasa,</i> 2 pills twice daily after meals
4		
5		
6		
7	<i>Rasayan and aampachan</i>	Tab <i>Rasaraj Rasa</i> , 1 tab twice daily after food
8		
9		
10		

On undergoing such treatment gradually he got relieved from fever, swelling and tenderness of the joints and he could walk, sit and stand within 10 days. Finally he was discharged and advised for follow up after 1 month.

On first follow up, he was treated with the following Ayurvedic formulations as mentioned below.

Table 02: Treatment protocol on first follow up.

Sl. No.	Name of the Medicine	Dose	Frequency	Main Ingredient	Anupan
1.	Tab Shallaki	2 tab	BD	<i>Shallaki</i>	Water
2.	Tab. <i>Giloy Ghanavati</i> ,	2 tab	BD	<i>Guduchi</i>	Water

On second follow up, he was treated with the following Ayurvedic formulations as mentioned below.

Table 03: Treatment protocol on second follow up.

Sl. No.	Name of the Medicine	Dose	Frequency	Main Ingredient	Anupan
1	<i>Kaishore guggulu</i>	2 tabs	OD	<i>Guduchi and Guggulu</i>	<i>water</i>

OUTCOME: The patient of reactive arthritis was admitted in indoor of Govt Ayurvedic College he was treated for 10 days and got relieved from the symptoms gradually which has been tabulated as below.

Table 04: Changes in Subjective parameters in first ten days.

Day	Date	Temp		Sandhi Pareeksha			
		Morning	Evening	Stiffness (<i>Stabdhata</i>)	Swelling (<i>Sandhi Sotha</i>)	Redness (<i>Raaga</i>)	Weakness (<i>Dourbalya</i>)
1.	01/07/2023	101°F	100°F	+++	+++	+++	+++
2.	02/07/2023	100°F	100°F	+++	++	++	++
3.	03/07/2023	98°F	98°F	++	++	++	++
4.	04/07/2023	98°F	98°F	++	+	+	+
5.	05/07/2023	98°F	98°F	+	+	+	+
6.	06/07/2023	98°F	98°F	-	-	-	-
7.	07/07/2023	98°F	98°F	-	-	-	-
8.	08/07/2023	98°F	98°F	-	-	-	-
9.	09/07/2023	98°F	98°F	-	-	-	-
10.	10/07/2023	98°F	98°F	-	-	-	-

Within ten days of treatment, the patient got relief and shows significant changes in the swelling and tenderness in ankle joints and other joints as well. All the other associated signs and symptoms improved. Moreover, there was changes in his laboratory parameters seen as follows.

Table 05: Changes in Objective parameters.

Sl. No.	Name of the investigation	Normal range	Date (20/06/23) Before treatment	Date (11/07/23) After treatment	Date (05/08/23) 1 st follow up	Date (02/12/23) 2 nd follow up
1.	RA factor	30 IU/mL	20.56	20.40	7.8	7.2
2.	ASO titre	<200 IU/mL	162.07	160.02	168	160
3.	CRP	0.0 – 6mg/dL	154.83	90.63	7.6	5

On follow up, clinically the patient was asymptomatic and his laboratory parameters were normal.

Clinical changes in the ankle joints are highlighted in the following photographs,



Photo Plate 01: Before treatment.



Photo Plate 02: After treatment.

DISCUSSION

In Ayurveda It has been mentioned that if a physician is not able to name a particular disease, he should not feel ashamed because it is not always possible to give a definite name to all the diseases (*anukta vyadhi*). The same *dosa* when aggravated may cause various diseases depending upon the etiological factors and site of manifestation.^[4]

So by knowing the *dosha*, *nidan* and *Ashraya* (site of manifestation) and also the *agni sthiti*, *srota*, *srota dusti*, *aamavastha*, *roga marga* etc. The treatment of this new disease (*anukta vyadhi*) was planned accordingly.

After doing the clinical examination (*trividh*, *astavidh* and *dasavidh pareeksha*), the patient was found to have *agni sthiti* as *mandagni*. So, accordingly *Langhan*, *Dipan* and *Pachan* was planned for first two days. Followed by addition of *Chitakadi vati* as medication.

Chitrakadi Vati is a tablet, used in Ayurvedic treatment of anorexia and indigestion. It improves digestion power. It is one of the widely used Ayurvedic tablet.^[5]

After attaining *samagni* lakshanas as he was suffering and from *Jwara*, *Sandhi saama avastha*, he was treated with *Sanjivani vati* and *Tribhuvan Kirti Rasa* for next five days.

Sanjivani vati is used due to its *jwaraghna* property.^[6] Moreover, it helps in *Aampachan* in the *Aamashaya* and *kostha*. Its contents like *sunthi*, *pippali* are *agnideepak*, *bhallatak* is *kaphanashak* and *suddha vatsanabh* is *jwaranashak*.

Tribhuvan Kirti Rasa whose main composition is *Vatsanabha*, is indicated in *Jwara*^[7] and also has an anti-inflammatory action. Being a herbomineral drug, it does *dhatugata aampachan*. *Dhatura* and *Higula* helps for the penetration of the medicine at cellular level.

On seventh day, *Rasaraj Rasa* was added. As this drug is indicated in all the *vataja vyadhis* and also mentioned to be *balya* and *vrishya*, hence it has been used as *rasayan*^[8] in this case. Finally, the patient was got relieved of all the signs and symptoms.

On the first follow up, the patient complained of mild pain on the both soles while walking. He was advised with *Shallaki* tablet and *Giloy Ghanavati*.

Shallaki has been used to reduce the *kapha* and *vata dusti* and as *shoolahara*.^[9]

Giloy ghanavati was used as *vatahara* drug^[10] and it also helps in boosting immunity in the body.

On second follow up, he was not having any new complaint and relieved of previous signs and symptoms. So he was advised to continue *Kaishore Guggulu* for next one month. *Kaishore guggulu* acts as *Rasayan*.^[11] *Guduchi* and *Guggulu* being the main content of *kaishore Guggulu* act as *raktasodhak* and *vatanashak*.

CONCLUSION

Treatment of any disease depends upon critical analysis of the *nidan*, *dosha*, *dushya* and *samprapti* of the *roga* and *rogi*. As innumerable diseases are emerging now a dys, considering them as *anukta vyadhis* can be treated on the basis of Ayurvedic principles.

In this study, it was observed that, a diagnosed patient of reactive arthritis was analysed on the basis of Ayurvedic principles and treatment modalities was developed for that patient which shows very encouraging result in treating the patients.

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