



‘A CONCEPTUAL STUDY ON ROLE OF SAPTAPARNA IN PSORIATIC ARTHRITIS W.S.R. TO VATARAKTA’

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ABSTRACT

Psoriatic Arthritis is more distressing disease prevalent in present era. It is a form of arthritis that affects roughly one third people who have psoriasis. Its exact prevalence is unknown, but estimates vary from 0.3% to 1% of the population, and it is a severe disease in at least 20% of patients. It is an inflammatory arthritis distinct from rheumatoid, being usually sero-negative, asymmetrical and often affecting the spine, sacro-iliac and distal interphalangeal joints. There are many similarities in Psoriatic Arthritis and Vatarakta. Psoriatic arthritis can be said as a subset of Vatarakta as Gout also resembles to it. Current therapies, such as methotrexate and sulphasalazine, have yet to be shown to be significantly more effective than placebo in delaying damage and produce only marginal improvements in symptoms. Any treatment for the arthritis must also help the skin. Due to excruciating pain, inflammation, joint deformity and restricted joint movements, it is necessary to have an overall review on all aspects of disease for treatment. Because of the morbidity, chronicity, incurability and complications, the management of Vatarakta is a difficult task. Hence an attempt has been made to focus on Shamana Aushadi recommended in different authentic texts of Ayurveda. Hence Saptaparna is selected for this study. Saptaparna is selected because it is effective, cheap and easily available for this dreadful condition of joints.

Dhanvantari and Shaligram Nighantu have indicated its use in Shula. [21] Regarding the therapeutic action of Saptaparna on Rakta Dhatu Raja Nighantu and Shaligram Nighantu have termed it Raktamaya and Raktarujapaha respectively. [22]

Bhavprakash Nighantu have indicated its use in Vrana, Kushtha, Shwasa and Gulma and Raktaj Vyadhi. Its properties are described as Kaphavataghna, Raktaprasadak, Deepan, Snigdha, Ushna. [23] Evaluation of efficacy of Saptaparna is the main aim and objective of this review.

KEYWORDS: Psoriatic Arthritis, Vatarakta, Saptaparna, Alstonia scholaris

INTRODUCTION

Vatarakta is a Tridoshaja Vyadhi. It is Vata pradhan and having Rakta as main Dushya. Vatarakta is an illness where both Vata and Rakta are afflicted by distinct etiological factors. Sedentary lifestyle along with mental stress, consumption of non-vegetarian and highly protein diet, excessive alcohol intake are some of the precipitating factors which cause acute exacerbation of Vatarakta. Due to all these factors Vata and Rakta gets vitiated, which gives birth to Vatarakta disease. These both vitiated Doshas get localized in the big toe of the foot or in the thumb of the hand. The etiology and symptomatology of Psoriatic Arthritis is certainly similar to that of Vatarakta. Psoriatic Arthritis can be said as a subset of Vatarakta as other diseases such as Gout also resembles to it as said by many scholars. [26]

Dhanvantari and Shaligram Nighantu have indicated its use in Shula.[21] Regarding the therapeutic action of Saptaparna on Rakta Dhatu Raja Nighantu and Shaligram Nighantu have termed it Raktamaya and Raktarujapaha respectively.[22]

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Psoriatic arthritis may be defined as psoriasis associated with inflammatory arthritis (peripheral arthritis and/or spondylitis) and usually a negative serologic test for rheumatoid factor. Clinical characteristics of the disease include: almost equal distribution between males and females; peripheral arthritis involving few small joints in asymmetrical fashion; involvement of DIP joints; sausage digits; arthritis mutilans; ankylosing spondylitis; gout-like onset; higher incidence of nail involvement than occurs in uncomplicated psoriasis. The rash may present with arthritis, or, equally, may precede or succeed joint involvement.

According to modern treatment, anti-inflammatory drugs, NSAID's, glucocorticoids are used to treat Psoriatic Arthritis symptomatically which have many adverse effects making the disease chronic after prolong usage. Therefore, there is a certain need to explore more efficacious and radical cure to this illness.

COMPREHENSION OF VATARAKTA

Nidan – Lavana, Amla, Katu, Kshara, Snigdha, Ushna Food, Ajirna Bhojan, Klinna Shushka Bhojan, Ambuja Mamsa, Anupa Mamsa, Pinyaka, Moolaka, Kulattha, Masha, Nishpava, Shaka, Dadhi, Adhyashana, Krodha, Diwaswaap, Ratri Jagaran and Sukumaratva. [5]

Lakshana - The two types or stages of Vatarakta as described in Ayurveda – Uttana and Gambhira.

Uttana Vatarakta Lakshana- blackish, red and coppery skin color associated with itching, burning sensation, pain, stretching, piercing pain, quivering and contraction.

Gambhira Vatarakta Lakshana- swelling, stiffness and hardness with severe pain inside, blackish or coppery, having burning sensation, piercing pain, quivering and inflammation, associated with distress and burning in stomach.[6]

Samprapti - Excessive intake of certain foods and excessive activities aggravate Vata and causes Vata Dushti. Consumption of lavana, amla, katu, kshara etc causes Rakta Dushti. The path of Dushita Vata gets obstructed by Dushit Rakta hence Vata gets vitiated further and vitiates dushita rakta again, creating vicious cycle, obstructing each other. Vata and Rakta takes ashraya in Sandhis causing Vatarakta. This causes serious painful symptoms.[7]

Principle of Ayurvedic Management [8]

In Ayurveda, the status of health and etiopathogenesis of disease depends upon status of Agni (digestion and metabolism). Therefore, the treatment is based upon correcting the digestion and metabolism. The Shaman Chikitsa of Vatarakta includes many drugs which are taken in single or combination form.

Saptaparna**Gunakarmas of Saptaparna**

No.	Rasapanchaka	Dh.Ni.	M.Ni.	Kai.Ni.	Bha.Ni.	Raj.Ni.	Sha.Ni.
1	Rasa	Kashaya			+	+	+
		Tikta					+
2	Guna	Snigdha			+	+	+
		Sara	+	+	+	+	+
		Surabhi	+				
		Madagandhi					+
3	Veerya	Ushna			+	+	+
4	Vipaka	Katu*					
5	Karma	Deepana	+		+	+	+
		Hridaya	+	+			+

Taxonomic Position:

Kingdom	-	Plantae
Division	-	Phanerogam
Subdivision	-	Angiosperm
Class	-	Dicotyledon
Sub-Class	-	Gamopetalae
Group-		Bicarpetae
Natural Order	-	Gentianales

Family	-	Apocynaceae
Sub family	-	Plumierioideae
Genus	-	Alstonia
Species	-	Scholaris

Therapeutic uses:

Therapeutic uses of the different parts of Saptaparna are as follows,

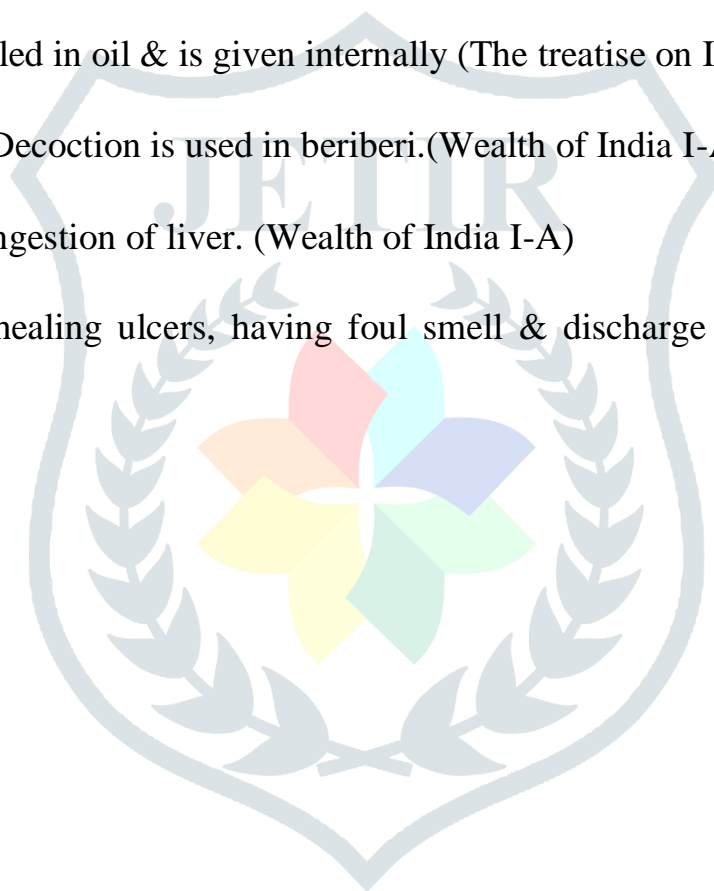
Leaves:

In dropsy leaves are boiled in oil & is given internally (The treatise on Indian medicinal plants.)

In eastern Malaysia its Decoction is used in beriberi.(Wealth of India I-A)

Decoction is used in congestion of liver. (Wealth of India I-A)

Poultices used in non healing ulcers, having foul smell & discharge (Indian medicinal plant



Bark:

It is used in leprosy; extract prepared from fresh bark is given with milk. (Indian medicinal plants.)

It is used in chronic paludism with enlargement of the spleen, dyspepsia and also used as antihelmintic and as an astringent tonic.

It is used in malaria as it decreases the temperature steadily in a short time. (Indian Pharmaceutical Codex)

Used in chronic diarrhoea and dysentery. (Indian Pharmaceutical Codex)

Latex:

Used as eardrop with oil. (The treatise on Indian medicinal plants.)

It is applied in sores & rheumatic pains (The treatise on Indian medicinal plants.)

Wood:

It is used to treat wounds. (The treatise on Indian medicinal plants.)

Root:

It is used in liver disorders.

Fruit:

It is used in epilepsy, syphilis & insanity.

ALKALOIDS OF ALSTONIA SCHOLARIS

Echitamine^{1, 2}, (as chloride), N⁶-Demethylechitamine, Scholarine, Akuammicine -N⁶-oxide, Akuammicine -N⁶-methiodide, Echitamidine, Tubotaiwine, Pseudo akuammigine³, Picrininc^{4,5}, Picralinal⁶, Stricatamine⁵, Akuammidine⁷, (rhazine), Tetrahydroaslstonine⁵, Nareline⁸, Ditamine⁹, Echitenine⁹.

CHEMICAL CONSTITUENTS:

Flowers - Alkaloids : picrinine, strictamine

Leaves - Alkaloids: betulin, ursolic acid, β -sitosterol, Picralinol, picrinine, and scholarin

Bark - glucoside triterpenes, α -amyrin acetate, glycoside- venoterpene, echitamine

Roots - tubaitowine akuammigine, akuammigine (Data base, Vol.-I).

Therapeutic uses in modern medicine -

Anti-tumour, Antiviral, Antihelminthic, Antimicrobial, Antifilarial, Antileishmanial, Antifertility, Anti-inflammatory and analgesic, etc.

PROBABLE MODE OF ACTION OF SAPTAPARNA**On the basis of Rasa**

Saptaparna is Tikta and Kashaya Rasatmak. Hence it has Deepan properties. Agnimandya is one of the causative factor for Vatarakta, it helps in Jatharagnideepan and helps relieve symptoms.

On the basis of Guna

Saptaparna is Snigdha and Sara and Ushna. Hence it has Snehana, Anulomak and Swedana properties, which helps in clearance of Strotas Avarodha, helps in pacifying Vitiated Vata Dosha and helps in reducing inflammation.

On the basis of Virya

Saptaparna is Ushna Viryatmaka hence helps in pacifying Vata Dosha. Hence relieves the symptoms of vitiated Vata Dosha.

On the basis of Vipak

Saptaparna has Katu vipak. In Katu Vipak there is predominance of Vayu, Akash and Agni Mahabhut. Hence it improves Jathragni.

On the basis of Dosha karma and Aushdha karma

Saptaparna has Deepan property which helps in improving Agnimandya, whis helps in Aam pachana. It also pacifies vitiated Vata Dosha. It is Raktamaya and Raktarujapaha. Hence acts

on Rakta Dushti. It is Vata-Kaphaghna. It is also indicated in Shoola in Nighantus. Hence it acts on both Vata and Rakta Dosha which are the main constituents of Samprapti.

Saptaparna is Vatakaphaghna, Kushthaghna. Nighantu have termed it as Raktamaya and Raktarujapaha. Hence acts on Rakta. It is also Tikta Rasatmaka, Deepana & Hrudya. That's why it acts on Rasa Dushti. It is said to act on Vrana which has Rakta Dushti. And it is said to act on Prameha, which has Mamsa Dushti. So Saptaparna can be said to act on Vata Kaphaj Vyadhi and Rasa, Rakta & Mamsa Dhatu.

S. Arulmozhi et al, 2014 reported that *Alstonia scholaris* is a promising medicinal plant, and is used in the treatment of various diseases including arthritis in folklore medicine.[17] It has been observed from different studies on AS that the anti-inflammatory and anti-arthritic bioactivity of this plant is because of the presence of various alkaloids and flavonoids.[18-20]

DISSCUSSION

Historically, patients with Psoriatic Arthritis were treated with 1. NSAIDS and 2. traditional disease-modifying drugs. However, the ability of these medications to slow down the radiographic progression of joint disease has not been demonstrated

So Vatarakta can also be treated by two ways and the pharmaco-dynamic aspect of Saptaparna is as follows,

Management of symptoms

Pain and inflammation is reduced due to antiinflammatory and analgesic properties of Saptaparna. The anti-arthritic activity of Saptaparna helps in reducing the symptoms of Vatarakta. The anti-oxidant activity of helps in the recovery and healing of deformed tissue.

Breaking down of Pathology

The anti-arthritic effect of Saptaparna might be due to the occurrence of phytoconstituents viz. tannin and phenolic content, alkaloids, glycosides, flavonoids, and steroids. When a phytoconstituent is capable of preventing protein denaturation and lysosomal membrane stabilization, it could be considered as an anti-arthritic, and anti-inflammatory drug. [25]

CONCLUSION

Saptaparna possesses many properties like anti-inflammatory, antioxidant, analgesic, anti-arthritic. These properties show that Saptaparna acts on Vatarakta and useful in treating Vatarakta.

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