

ARTHRITIS IN ANCIENT INDIAN LITERATURE

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(Received 29 January 1973 ; after revision 28 April 1973)

Arthritic diseases have been known to exist since great antiquity. Probably the earliest detailed description of arthritis occurs in *Atharvaveda*, having been composed about 1000 B.C. *Caraka Samhitā*, written in the post vedic period, has dealt more accurately with the aetiology, symptomatology, diagnosis and treatment of arthritis. Caraka has prescribed, both, local and systemic medicaments for the treatment of arthritic diseases. Prognosis of these disorders, as proclaimed by ancient physicians of India, still remains unaltered.

Recently a new compound has been isolated from *gum-guggulu* (*Commiphora mukul*) (under the name of Fraction A, which has been found effective as an antiarthritic and hypocholesteraemic agent. These findings support the ancient India physician's concept and suggest that many of the ancient Indian medicaments can be made useful therapeutic agents, if properly screened with the help of modern research techniques.

The earliest evidence in India that arthritis crippled human life is accorded in *Atharvaveda* which was composed about 1,000 B.C.¹ as is evident from the following verse.

पादाभ्यां ते जानुभ्यां श्रीणिभ्यां परिमंससः ।

अनुकादर्षणोरुष्णिहाम्यः शीर्ष्णो रोगमनोशम् ॥

"I remove the acute pain and its causative factors from the feet, legs, buttock, thigh, back bone, neck joints and head (which are known to cripple thy life)."²

Of the four Vedas, *Atharvaveda* could possibly have been compiled last hence it encompasses deeper thought on the aetiology and management of diseases.

In the post-Vedic period two noble books were written under the name of *Caraka* and *Suśruta Samhitās*, which record profound depth of ancient medical knowledge. Caraka is one of the greatest scientist philosophers of antiquity, who lived about 2,500 years ago. He has dealt in a great detail with the aetiology and management of arthritis. Describing the sign and symptoms of arthritis, Caraka mentions:

संकोचः पर्वणां स्तम्भो भेदोऽस्थनां पर्वणामपि ।

लोमहर्षः प्रलापश्च पाणिपृष्ठशिरोग्रहः ॥

खाञ्ज्यपागुल्यकुञ्जत्वं शोषोऽगानामनिद्रता ॥

“Contraction, stiffness of joints, aching pain in the bones and joints, horripilation, garrulousness, spasticity of the hands, back and head, limping and lameness, hunch-back, atrophy of the limbs and insomnia” (these are the signs of arthritis).³

Caraka classified the rheumatic conditions into two sub-groups such as ‘superficial and deep’ as is evident from the following quotation.

द्विविधं वातरक्तमिति गम्भीरमुत्तानं च ॥

“The two varieties of rheumatic conditions are ‘superficial and deep’.⁴

Regarding the sign and symptoms, of arthritis, Caraka mentions further

कण्डूदाहरुगामतोदस्फुरणकुचनैः ।

अन्विताश्यावरक्ता त्वग्वाह्ये ताम्रा तथेष्यते ॥

“Pruritus, burning, pain, extension, aching or throbbing pain and contraction, accompanied with the dusky red or coppery coloration of the skin are considered the symptoms in the superficial type of rheumatic conditions.”⁵

गम्भीरे श्वयथुः स्तन्यः कठिनोऽन्तमृशार्तिमान् ।

श्वक्स्ताम्रोऽथवा दाहतोदस्फुरणपाकवान् ॥

“In the deeper type, there occurs swelling, rigidity, hardness, agonizing pain inside the joints, dusky-red or coppery coloration, burning, pricking and throbbing pain, and tendency to suppuration.”⁶

श्वयथुर्मृशश्क् तोदस्ताम्रश्चिमिचिमायते ।

स्निग्धरुक्षोः समं नैति कण्डूक्लेदान्वितोऽसृजि ॥

“Swelling, excessive pain, pricking pain, coppery coloration, tingling sensation, non-yielding to either unctuous or dry treatment and accompaniment of pruritus and softening, are the symptoms in a conditions of viciation of blood.”⁷

रक्तमार्गं निहन्त्याशु शाखासन्धिषु मारुतः ।

निविश्यान्वोन्यमावार्यं वेदनामिर्हरेदसून् ॥

“The provoked *vāta*, located in the joints of the extremities, block the channels of the blood. Then the blood and the *vāta* obstruct each other’s course and may even cause death, by the severity to the pain occasioned.”⁸

According to *tridoṣa* or tridiscordance theory, Caraka considered that arthritis is born due to the disturbances of *vāta*, as is evident from the following quotations,

सौक्ष्म्यात् सर्वसरत्वाच्च पवनस्यासृजस्तथा ।
 तद् द्रवत्वात् सरत्वाच्च देहं गच्छत् सिरायनैः ॥
 पर्वस्वभिहतं शुक्लं वक्त्र्वादवतिष्ठते ।
 स्थितं पित्तादि संसृष्टं तास्ताः सृजति वेदना ॥
 करोति दुःखं तेष्वेव तस्मात् प्रायेण सन्धिषु ।
 भवन्ति वेदनास्तास्ता व्रत्यथं दुःसहा नृणाम् ॥

“By reason of the subtle and all-pervasive character of *vāta* and of the liquid and flowing nature of the blood, the toxic element, spreading by means of the circulating channels into the whole body, gets obstructed, and gets localized in the joints, due to the tortuous nature of its course associated with *pitta* or *vāta* and causes pains characteristic of each humor. Hence it generally causes pain in those joints only. The various kinds of pains, thus caused are indeed exquisitely agonising to their victims”.⁹

मेदोऽस्थिपर्वणां सन्धिशूलं मांसबलक्षयः ।
 अस्वप्नः सन्तता रुक् च मज्जास्थिकुपितेऽनिले ॥

“If the *vāta* located in the bone and bone-marrow gets provoked, there occurs cracking pain in bones and joints, arthralgia, loss of flesh and strength, loss of sleep and constant pain”.¹⁰

वातपूर्णद्वृत्तिस्पर्शः शोथः सन्धिगतोऽनिलो ।
 प्रसारणाकुंचनयोः प्रवृत्तिश्च सवेदना ॥

“If *vāta*, located in the joints, is provoked, there occurs the swelling of the joints which feel on palpation as if they were bags, inflated with air and the movements of extension and flexion are accompanied with pain”.¹¹

चलः स्निग्धो मुदुः शीतः शोफोऽग्नेवरुचिस्तथा ।
 आटयवात इति ज्ञेयः सकृच्छ्रो मेदसाऽऽवृतः ॥

“When the *vāta* is occluded in the adipose tissue, there will be produced local swellings that are movable, smooth, soft and cold and there would be anorexia also. This condition is known as a *rheumatic condition* and is difficult to cure”.¹²

Rheumatoid arthritis is the disease of small joints but it may involve knee, elbow and other bigger joints. The small joints of hands are especially involved. Caraka described the site of manifestation of rheumatoid arthritis in the following words.

तस्यस्थानं करौ पादावंगुल्यः सर्वसन्धयः ।
 कृत्वाऽऽदौ हस्तापादे तु मूलं देहे विधावति ॥

“The sites of its manifestation are hands, feet, fingers, toes and all the joints. It establishes its base first in the hands and feet and then spreads in the entire body”.¹³

The last portion of this version indicates the depth of knowledge possessed by Caraka on rheumatic diseases. He considered rheumatoid arthritis a systemic

disease, involving many organs such as liver, spleen, heart, lung, and kidneys, etc. although these names are not mentioned here. It appears that these pioneers were well conversant with the fact that blood circulating through circulatory channels served as a vehicle for the spread of toxic material in the entire body. Biochemical variation in the metabolic processes, occurring in the body, were not unknown. Following is an excellent example to indicate the depth of knowledge of biochemical mechanisms occurring in the body.

यावन्तः पुरुषे मूर्तिमन्तो भावविशेषास्तावन्त एवास्मिन्
 स्रोतसां प्रकारविशेषाः ।
 सवे भावाहिपुरुषे नान्तरेण स्रोतांस्यभिनिर्वर्तन्ते,
 क्षयं वाऽप्ययभिगच्छन्ति ॥
 स्रोतांसि खलुपरिणाममापद्यमानानां ।
 घातूनामभिवाहीनि भवन्त्ययनाथेन ॥

"There is much functional diversity in the system of circulation in the human body as there is elemental diversity in the structural composition of the body. None of the elements in the body can flourish or decay independently of the channels of the circulation. It is indeed these channels that by conveying the body elements—which are undergoing metabolic processes—subserve the purpose of circulation."¹⁴

Arthritis has long been the cause of physical disability and mental worry to the sufferers. In spite of the rapid progress in drug research, the contribution in this direction has rather been meagre. The value of indigenous drugs, remains unexplored. The ancient physicians of India used camphor, turmeric, medicated oil and local medicaments for the relief of the pain. In the history of medicine, they were the first to use *gum-guggulu* (*Commiphora mukul*) for the treatment of arthritis which is likely to prove a drug of choice in modern times as well.

Recently Sharma *et al.*¹⁵ have shown the clinical efficacy of Fraction A of *gum-guggulu* in the treatment of Rheumatoid arthritis, which has been reported to be superior to phenylbutazone. Similarly Fraction A has been found to be effective hypocholesteraeamic agent by Malhotra and Ahuja¹⁶. These interesting results have opened new *vistas* on the research of *gum-guggulu*, which has been used in *Āyurvedic* system of medicine for thousands of years.

Following are the few quotations from *Caraka Saṃhitā*, regarding the treatment of arthritis.

मुस्तं किष्वं तिलाः कुष्ठं सुराद्वयं लवणं नतम् ।
 दधिक्षीरचतुः स्नेहैः सिद्धं स्यादुपनाहनम् ॥

"The preparations made of nutgrass, yeast, *tila*, costus, *deodār*, rocksalt and Indian valerian along with curd, milk and the tetrad of unctuous articles should be used as poultice."¹⁷

उत्कारिकावेसवारक्षीरमाषतिलौदनैः ।
 एरण्डबीजगोधूमयवकोलस्थिरादिनिः ॥
 सस्नेहैः सरुजं गात्रमालिप्य बहुलं भिषक् ।
 एरण्डपत्रैर्बन्धीयाद्रात्रौ कल्यं विमोक्षयेन् ॥

“The physician should give on the painful part, a thick application prepared of pancakes, *vesavāra* preparation, milk, black gram, *tīla*, cooked rice, castor seeds, wheat, barley, jujube and ticktre-foil groups of drugs, mixed with unctuous articles. This application should be made at night and bandaged with castor leaves, and the bandage should be removed the next morning.”¹⁸

बोधिवृक्षकषायं तु प्रपिबेन्मधुना सह ।
 वातरक्तं जयत्याशु त्रिदोषमपि दारुणम् ॥
 पुराणयवगोधूमशोध्वरिष्टसुरासवैः ।
 शिलाजतुप्रयोगैश्च गुग्गुलोर्माक्षिकस्य च ॥

“The decoction of the holy fig tree (*Pipal*) taken as a portion mixed with honey, subdues rheumatic conditions quickly, even if caused by severe tridiscordance. The conditions may also be cured by a course of old barely, wheat, sidhu-wine, medicated-wine or sura-wine, or by a course of mineral pitch (*śīlājīti*) and *gum-guggulu* or honey”.¹⁹

रसायनानां सर्वेषामुपयोगः प्रशस्यते ।
 शैलस्य जतुनोऽत्यर्थं पयसा गुग्गुलोस्तथा ॥

“The use of all kinds of vitalizers is highly recommended. A course of mineral pitch (*śīlājīti*) and so a course of *gum-guggulu* with milk are specially beneficial.”²⁰

गृहधूमो वचा कुष्ठं शताद्वा रजनोद्वयम् ।
 प्रलेपः शूलनुद्वातरक्ते वातकफोत्तरे ॥

“The unguent, prepared from kitchen, sweet flag, costus, *tīl* seeds turmeric and Indian berberry, is curative of rheumatic conditions associated with predominant provocation of *vata-cum-kapha*”.²¹

Regarding the curability and incurability of rheumatoid arthritis Caraka considers like a best physician of today, in the following manner.

एकदोषानुगं साध्यं नवं याप्यं द्विदोषजम् ।
 त्रिदोषजमसाध्यं स्याद् यस्य च स्युरूपद्रवाः ॥

“That condition is curable which is of recent origin, resulting from the provocation of a single humor. The condition resulting from bidiscordance is only palliable and the condition born of tridiscordance as well as the one attended with complications, are incurable.”²²

SUMMARY

The literature reviewed in this article amply shows that ancient Indian physicians had sufficient knowledge about the aetiology, symptomatology and

management of various arthritic diseases. The clinical efficacy of *gum guggulu* (*Commiphora mukul*), an Āyurvedic drug used for several thousands of years in the treatment of such disorders due to derrangements of *vāta*, *vātarakta* and *āmavāta*, stands the test of modern research methodology, which all the more further necessitates research in this field.

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