RHEUMATOID ARTHRITIS AND ASTERACANtha LONGIFOLIA
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ABSTRACT: Rheumatoid Arthritis is one of the most crippling disorders known to man. In the advanced condition of eh disease, it is known to be incurable by the allopathy, ayurveda and homeopathy treatment. But in the initial stages the paneeya made out of kokilasha (Asteracantha longifolia) is found to be very effective in alleviating the symptoms in the hapless victims of rheumatoid arthritis as stipulated in ashtanga hridaya. This paper deals with the role of asteracantha longifolia in the treatment of Rheumatoid arthritis.

INTRODUCTION:
Rheumatoid arthritis is present in all the countries of the world irrespective of cst, creed or ace. The exact aetiology and permanent cure still elude man. There is an ever ending debate among the ayurvedists about the equation of the Rheumatoid arthritis. At the time of writing of the ayurvedic classics this illness did not exist in human beings and hence one may not find an exact equivalent in these text books. Archeological investigations tell us that Rheumatoid changes are not seen in excavated skeleton of human beings who lived before 16th century. In the initial stages the disease manifests as pithadhika condition and later on passes to vat kaphathika stage. In both these stages, the paneeya made out of kokilasha (Vayal chully, Asteracantha longifolia) is found to be very effective in alleviating the symptoms in the hapless victims of Rheumatoid Arthritis.

Ashtanga hridaya also prescribes, “Kakilakshaka Niruha peethatha chaka bhogitha kripabyasa iva krotha vatha rakhtam Niyachathi”

Asteracantha longifolia is a spiny herb 2-4’ height, found in moist places through our India and Ceylon. With water its seeds develop a large amount of tenacious mucilage.

Literature survey on the chemical investigations of the plant shows the presence of the following constituents.

Plant contains a phytosterol essential oil is present in tereots of the seeds is due to large amount of mucilage and potassium salts, seeds also contain 23% of an yellow semi drying oil. Diastase, lipase, protease and a alkaloid were isolated from the seeds. Asterol I,II,III and IV, Asteracanthen and Asteracanthiscine were also isolated from the seeds. An alkaloid and lupeol were also isolated from the whole plant.

Quasim and Dutta isolated lupeol and stigmatsterol from the plant. Studies on amino acid composition of the seeds revealed that the protein content is higher than tat of pea nuts and the histidine, lysine and pheny alanine content of the protein are...
higher than that in pea nut protein\textsuperscript{11}. The studies of Balraj and Nagarajan showed the presence of apigenin 7-0-glucuronide\textsuperscript{12} in the fresh flowers.

Modern medicine\textsuperscript{13} prescribes aspirin as the simplest preparation that should be used first for the treatment of Rheumatoid Arthritis. Second line treatment is with either Ibuprofen or indomethacin. When these measures fail to control symptoms, other drugs such as gold salts, chloroquine and steroids are used. All have serious potential side effects and gold salts, & chloroquin should be used for a limited period and steroid once started has usually to be continued indefinitely.

Looking at the clinical action of the plant it is definite that it contains very potent steroidal or non-steroidal anti-inflammatory principles. Scientific studies\textsuperscript{14} revealed that the anti inflammatory property of the plant is even equal to Butazolidine and prednisolone. The importance of the plant is that of corticosteroids. It will not have their side effects. The isolation of these active principles from the plant will certainly help to alleviate the symptom of Rheumatoid Arthritis.

Rheumatoid arthritis is seen described as a ‘Metabolic disease (Amavatham). In the conversion of one tissue to another (dhatu parinam) waste products are produced in each stage and if the are not eliminated by the body, the metabolites accumulate and cause the disease\textsuperscript{15}. The diastase lipase, protease etc. present in asteracantha longifolia may probably help for the removal of waste products which in turn reduce the pain selling and stiffness.

The chemical investigation of the plant showed that it as a very high protein content. The higher protein content of the plant may probably help to raise the immunity of the patient. It may help for the destruction of immune aggregate, i.e. antigen antibody complexes which is one of the basic cause of the disease.

During the course of the disease the fat in the limbs are dried up leaving the joints swollen wither with the inflammation fluid or with the thickening of the tissue. The higher oil content of the plant may probably reduce the swelling in the joints.

In short, the presence of protein, steroids, alkaloids, glycosides, enzymes, semi drying oil etc render the plant very effective for Rheumatoid Arthritis as mentioned in Ashtangahridaya. It is possible that the plant exerts its clinical effect with a hitherto unknown non-steroidal anti inflammatory agent & hence a deep chemical study of Asteracantha longifolia will yield much reward.

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