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INTRODUCTION

Although, in many ways, we have greater opportunities for a rich and fulfilling life then ever before, it is clear that we need to evolve new strategies if we are to survive and thrive as individual and as a species. In order to achieve this goal it is simply required of us to overcome over literal and linear process of thought to enter into a non-linear reasoning approach. Ayurvedic medicine is certainly one of the oldest systems with a consistent theoretical basis and practical clinical application. Into its ancient well of profound healing wisdom, some of the greatest sages have poured their finest insights and discoveries. The strength of Ayurveda lies in its broad, all encompassing view of the dynamic inter-relationship between organic physiological processes, external factors including climate, life work and diet along with internal emotional stages. Ayurveda, with its Tridoṣa or three humours system, is able to provide a complete understanding of the cause of health in terms of a metabolic balance. Disease is simply understood as an imbalance between the nerve energy (Vāṭa), catabolic fire energy (Pitta) and anabolic nutritive energy (Kapha). All foods, experiences and drugs have an effect on the overall balance of these respective humours.

My worthy guide for present work, Prof. Dr. Jayant Keshav Barde perceives Ayurveda in a different mood and gesture. He gives a comprehensive approach as to what Ayurveda is? Ayurveda according to him is Promotive, Protective, Preventive, Curative and Supportive system. This approach on the one hand describes prevention, protection and promotion of the life process and on the other hand details the sense of cure of the diseased biological system and support to it to maintain a state of equilibrium.
As per the therapeutics is concerned, the Ayurvedic system of medicine gives a special importance to the herbs. Herbs are nothing but “Special foods” serving to eliminate excess and strengthen deficiencies. While they may possess a powerful nutritive impact on the weekend body, their primary function is to stimulate particular organic function. There is a reference in Chandogya Upaniṣada which translates, “The essence of all beings is Earth. The essence of the Earth is Water. The essence of Water is Plants. The essence of Plants is the human being.” In a way herbs are the repositories of nature’s wisdom. We find a reference in Vedas where salutations are paid to all the components of the universe and it is prayed that all manifestations of the nature including Auṣḍhi (Drugs) and Vanaspati (Plants) may remain in a balanced state doing good to all.

Plants have ever been a source of fascination and interest for the humans from the time immemorial as both of them belong to the same category of living world. A lot of herbal drugs have been put to use for the alleviation of the human miseries but still a fatty number of them remains unvalidated scientifically, although, the use of such herbs and plants is in practice in the folk medicine. The drug under the study “Cakramarda (Cassia tora, Linn.)” which is abundantly available in our country has never been put to judicious use despite of its having diverse properties. In Ayurvedic system of medicine the seeds of this drug are said to be Kaṭu (pungent) in rasa and Üṣṇa in Vīrya (hot in potency). These are described as alleviator of Kapha and Vāta and cure Kuṣṭha (obstinate skin diseases), Gulma (localized abdominal tumour), Kāsa (cough), Krmi (parasitic infection) and Śvāsa (breathlessness). In Chinese herbal medicine, these seeds are used to improve vision and for their aperient, antiasthenic and diuretic properties. Different scientific studies have demonstrated the diversified medicinal uses of this drug Cassia tora but till date no work has been done for its establishment as an anti-arthritic drug. Its seeds are taken orally as folk-
remedy for the cure of rheumatism in some of the rural areas of Jammu (J&K) region.

Based upon the this folk-lore and inferring the classically mentioned properties and actions of the seeds of Cakramarda (Cassia tora), a preliminary clinical study was conducted to evaluate its efficacy in “Āmavāta”, clinical manifestations of which are very much similar to that of Rheumatoid Arthritis and management of which still remains a problem to the medical science. The seed powder of the drug was combined with a well known Āyurvedic drug Guggulu (Commiphora mukul, Hook. Ex. Stocks) which is an excellent Yogavāhī (a compound that carries the other substances mixed with it, to deep in to the tissues) and itself is having an anti-inflammatory action. This combination of Cakramarda and Guggulu as observed after the preliminary clinical study was found very effective in the management of Āmavāta (Rheumatoid Arthritis).

The description of the disease “Āmavāta” in Āyurveda was recognised first by Mādhava somewhere in 9th century and has been described in his book of clinical medicine entitled as “Mādhava Nidāna”. Along with the clinical features and management, concept of aetio-pathogenesis has been discussed to a great length. In Āyurveda, more importance is attached to explain the basic and fundamental changes both for understanding the disease process and for the management and it is highly advocated that the diseases are best attacked at their source and not at their end.

The prevalence of Rheumatoid Arthritis is approximately 0.8 percent of the population (range 0.3 to 2.1 percent); women are affected approximately three times more often than men. The prevalence increases with age, and sex differences, diminish in the older age group. The disease is seen throughout the world and affects all races. However, the incidence and severity seem to be less in rural sub-Saharan Africa and in Caribbean blacks.
The onset is most frequent during the fourth and fifth decades of life, with 80 percent of all patients developing the disease between the ages of 35 and 50. The incidence of RA is more than six times as great in 60 to 64 year old women compared to 18 to 29 year old women.

Rheumatoid Arthritis can attack any synovial joint in the body. Excepting the distal inter-phalangeal joints, it has the greatest affinity for the small joints of the hand, wrist, and foot. In many cases the joint involvement in the limbs becomes relatively symmetrical. Further, the cervical spine, usually the superior aspect, becomes affected. Early in the course of the disease several changes in joint structures occur. Joint effusion and inflammation of the synovium occur producing a soft tissue swelling that is easily detected during evaluation of the patient. Additionally, changes (osteoporosis) in the ends of the bones forming the joint may be present early in the disease process. In the later stage, bone destruction occurs at areas where the hyaline cartilage and the synovial lining do not adequately cover the bone. Thus, joint destruction can progress to the degree that joint motion is significantly limited and joints can become markedly unstable.

Although, this disease does not pose a serious threat to the life of the patient yet it makes life very miserable and crippling not allowing the victim to become a normal participant of the society at large demoralizing him emotionally, thus snatching happiness from his life. In modern system of medicine, two groups of drugs namely NSAIDS and DMARDS are prescribed along with other measures but they are not yielding very successful results instead they are producing other hazards. In Ayurvedic system of medicine, aetio-pathogenesis of the disease along with the ways for its management are elaborately discussed in contrast to the western system of medicine where there is no clear cut explanation regarding its aetio-pathogenesis and management thereof. So many drugs therapies are
being used in Āyurvedic system of medicine which hit at the very root of the disease process.

The present study entitled “Effect of Cakramarda Guggulu compound in Āmāvāta (Rheumatoid Arthritis)” was proposed and taken up to evaluate and establish the efficacy of the easily and abundantly available but unutilized drug Cakramarda (Cassia tora) in combination with Guggulu (Commiphora mukul) for its anti-rheumatoid arthritis activity.
SELECTION OF TOPIC

The seeds of Cakramarda are used as a folk remedy for the cure of different arthralgias in the far flung rural areas of Jammu region. Although no classical reference regarding its use in such disease conditions as referred to above is found yet it is being used successfully. Based upon this folk-medical lore and drawing inference from the classically mentioned properties and actions of the drug as Tikṣṇa and Kaṭu (piercing and pungent) (Rā. Ni. 4: 200) and subduer of Kapha and Vāta (Aṣ. Sam. Sü. 12: 91; Da. Ni. Kar. Varga 2: 5), a preliminary clinical study was conducted successfully to evaluate its effect in Āmavāta, clinical manifestations of which bear a similarity to that of Rheumatoid Arthritis and the management of which still poses a challenge to the medical science.

In the present study entitled “Effect of Cakramarda Guggulu compound in Āmavāta (Rheumatoid arthritis)”, the seed powder of the drug was combined with Guggulu (Commiphora mukul) which is an excellent Yogavāhi (which carries other substances deep into the tissues of the body) and Šothahara (anti-inflammatory). The study was taken up to evaluate the efficacy of Cakramarda Guggulu compound in comparison with that of Cakarmarda seed powder.
AIMS AND OBJECTIVES

1. To clinically evaluate the effect of Cakramarda Guggulu compound in comparison with Cakramarda seed powder in Āmavāta (Rheumatoid Arthritis).

2. To investigate the anti-inflammatory activity of the drugs in albino rats.

3. To study the acute toxicity of the drugs in albino rats.

4. To find out the toleration of the drugs to the patients and adverse effects, if any.

5. To Standardize Cakramarda Guggulu Compound and Cakramarda seed powder before their administration.
PLAN OF WORK

The work was planned and carried out in following stages:

1. Review of literature

2. Standardization of trial drugs
   a) Preparation of drugs
   b) Microscopic analysis
   c) Quantitative analysis
   d) Thin Layer Chromatography
   e) X-ray analysis
   f) Determination of Rasa and its taste threshold

4. Pharmacological study
   a) Toxicity study
   b) Anti-inflammatory activity study

5. Clinical study