

“MEDICINAL IMPORTANCE OF CHAKRAMARDA (CASSIA TORA LINN)”

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ABSTRACT

Chakramarda (*Cassia tora* Linn) has been used in the Indian system of medicine since long time. In Charaka samhita, it has been classified under shakavarga & shimbivarga while Sushruta has classified it under urdhvabhaghara dravya (drugs which expel out the doshas of stomach through mouth i.e. by vomiting) and shakavarga. It has properties like katu rasa, laghu guna, ushna virya and katu vipaka. Its action includes kaphavatashamana (pacifies kapha and vata dosha), hridya (beneficial for heart), swasaghna (antidyspnoeic), kusthaghna (cures skin disorders), dadrugghna (cures ringworm), krimighna (removes worm infestation), kandughna (antipruritic), vishaghna (removes entoxication), gulmagghna (destroys abdominal lump), kasaghna (antitussive) etc. In Ayurvedic texts, it has been widely used either alone or with other drugs in the form of different preparations like paste, oil, powder etc for the treatment of kushtha, ringworm, nadivrana (sinuses), infected wounds, suryavarta roga (the headache

increasing with rise of sun and decreasing with sunset), all types of severe shotha (inflammation) especially having predominance of kapha and vata, difficult delivery, vatavyadhi, difficult types of gandamala (goiter), chronic wound, spots of skin, swasa (dyspnoea), kasa (cough), jwara (fever), prameha, aruchi (anorexia), krimi, medavridhi

(increase in body fat) etc. This article summarizes the uses of Chakramarda especially in ayurvedic texts with an aim to provide the new treatment measures in various diseases.

KEY WORDS: Chakramarda, *Cassia tora* Linn, Ringworm plant, Ayurveda.

INTRODUCTION

The botanical name of Ringworm plant is *Cassia tora* Linn and it belongs to the family Caesalpiniaceae. It has synonyms like prapunnada, meshalochana, chakri, dadrughna, padmaata, edagaja etc. It is found as weed throughout India not only along roadside and waste places but also in forest outskirts. It is an erect, annual herb with height up to ¼ -1.5 m and has alternate, paripinnate leaves with three pairs leaflet.^[1]

Properties

According to Ayurveda, it has katu (pungent) rasa (taste), laghu (produces lightness in body after digestion) and ruksha (dry) guna. It is ushna virya (hot in potency) and katu in vipaka (produces effects of katu rasa in body when final transformation occurs after the digestion).^[2]

Chemical Constituents

The leaves contain Anthraquinone glycosides (chrysophanol, rhein, emodine, physion, Obtusin, chryso-obtusin, chryso-obtusin-2-O-β-D-glucoside, obtusifolin and chryso-obtusifolin-2-O- β -D-glucoside) and Flavonoids. ^[3,4] Its seed contains emodin, chrysophanol, physion, rubrofusarin, two glycosides namely 8-Hydroxy-3-methyl anthraquinone -1- β -gentiobioside & rubrofusarin -6- β -gentiobioside and sitosterol. ^[5] It also contains three naphthopyrone glucosides like cassiaside, rubrofusarin -6-O- β-D-gentiobioside and toralactone -9-O- β-D- -gentiobioside.^[6] Its seed contains mainly proteins with abundance of essential amino-acids like methionine and tryptophan. ^[7] Its seed oil contains palmitic, stearic oleic, linoleic and lignoceric acids. ^[8]

Classification

In Charaka Samhita, it has been classified under Shakavarga & Shimbivarga while Sushruta has kept it under Urdhvabhaghara dravya and shakavarga. In nighantus, it has been kept under shatavadi varga by raja nighantu, haritakyadi varga by bhavaprakash nighantu, abhahyadi varga by madanapal nighantu, oshadhi varga by kaideva nighantu and karviradi varga by dhanwantari nighantu and sodhala nighantu.

Action

Its action includes kaphavatashamana (pacifies kapha and vata dosha), hridya, swasaghna, kusthaghna (cures skin disorders), dadrugghna, krimighna, kandughna vishaghna, gulmagghna, kasaghna etc.^[9]

Classical and current uses

No reference or description of Chakramarda can be found in Vedic period. In Indian system of medicine, its seed has been used with karanja seed and kootha to treat the kustha (skin disorders) in the form of lepa made with urine of cow.^[10] Similarly for the same disorder, its seed can be mixed with equal amount of rasanjana and made as lepa by using juice of leaves of kapittha.^[11] The oil (vajraka oil) made with its seed and saptaparna, karanja, arka, karveera etc dravya is used to treat sinuses and infected wounds.^[12] In ringworm disease, its seed, rock salt, jaggery and naagakeshara are mixed with juice of kapittha to make a lepa and is applied externally.^[13] The lepa prepared with its seed and sour substances is applied on forehead to treat suryavarta roga.^[14] The oil made with its seed and palasha, hastikarnapalasha, sarala, devdaru, guduchi, devapuspa bharangi, shuska mulaka etc dravya is used to treat all types of severe shotha especially having predominance of kapha and vata.^[15] The finely pounded roots putted into vagina to help easy delivery.^[16] Its leaves alleviate vatavyadhi if used as vegetables or other dietary preparations.^[17] The chakramarda oil (the oil prepared by mixing and heating the paste of root of chakramarda with juice of bhringaraja and katu oil and after heating it is mixed with sindur) is used to treat difficult types of Gandamala.^[18] It is one of the constituents of Panchnimba Churna which is used as rasayana and in treatment of Kustha.^[19] Its one of the formulation (Kasisadi ghrita) is used to massage the skin in various skin disorders like kustha, ringworm, chronic wound and spots of skin etc.^[20] According to Kaideva, it is used to treat diseases like Swasa, Kasa, Jwara, Prameha, Aruchi, Krumi and Kustha.^[21] Narhari Pandit has also mentioned its use in Medavridhi.^[22] The Ayurvedic Pharmacopoeia of India indicated the use of the seed in paralysis and hemiplegia as a supporting drug. Mature leaves possess purgative properties and are sometimes utilized to adulterate the true senna; also used as an antiperiodic and anthelmintic. The leaf extract exhibited antifungal activity against the ringworm fungus *Microsporon nanum*. The constituents of seed like anthraquinone glycosides, naphtho-pyrone glycosides, cassiaside etc showed significant hepatoprotective activity. Thrachrysone, isolated from seeds, showed stronger antioxidant activity than tocopherol and BHA. Chrysophanic acid-9-anthrone, extracted from the seed, was found to be active against ringworm fungi.^[23] Ononitol

monohydrate isolated from its leaves showed potent hepatoprotective activity.^[24] It has been found to have Hypolipidemic action^[25,26] (showed marked reduction in serum concentration of total cholesterol and triglyceride level), Antifungal action against *Candida albicans*, *Aspergillus niger*, *Sachharomyces cerevisiae* and *Trichophyton mentagrophyte*,^[27] Anti-inflammatory activity against histamine, serotonin and dextran induced oedema,^[28] Antitumor action (due to presence of an anthraquinone 'Emodine' in its root and bark, it shows cytotoxic property)^[29] etc.

CONCLUSION

From the above review, it can be concluded that Chakramarda is very well known drug of Indian system of medicine, useful in various diseases and disorders like kushtha, ringworm, nadvirana (sinuses), infected wounds, all types of severe shotha especially having predominance of kapha and vata, vatavyadhi, chronic wound, spots of skin, swasa, kasa, jwara, prameha, aruchi, krimi, etc. The uses of Chakramarda explored in this article can provide the new treatment measures in many diseases especially suryavarta roga, difficult types of gandamala (goiter), difficult delivery, medavridhhi and prameha but before its recommendation, its scientific validation, standardization and safety evaluation should be done.

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