



Therapeutic uses of Chandana (Santalum album Linn) a Scientific and Experiential view

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Abstract

Herbs are utilized in the management of various disorders by the physicians worldwide. They are used either single or in formulation. Chandana (Santalum album) is one such drug which is used commonly on skin disorders and diseases pertaining to urinary tract. It is Tikta rasayukta, Sheetavirya, Raktashuddhikara, Kushthaghna, Dahahara, Soumanasyajanana, Pittahara, urinary antiseptic, and Rasayana in action. It is commonly used in the management of Daha, UTI, Visarpa, Vicharchika, Pama, Padadari, Dadru, Kushtha, Sidhma, Chickenpox, measles, Herpes zoster, herpes simplex, Tinea corporis, Tinea cruris, Tinea capitis, Psoriasis, Pemphigus, Chronic pyelonephritis, folliculitis and furunculosis. Since it is Raktashodhaka, Rasayana, Pittahara, Kushthaghna, Kandughna and Tiktarasayukta drug, it is effective in most of the skin disorders. Since it is urinary antiseptic, antibacterial and antiinfective, it is used in the management of urinary tract disorders.

The present paper highlights about the therapeutic uses of Chandana (Santalum album) in Scientific and experiential view.

Key words

Chandana, Kushthaghna, Rakta shodhaka, urinary antiseptic.

Aim and Objectives - To study about the therapeutic uses of Chandana (Santalum album) in a scientific and experiential view

Methods

Relevant subject materials are compiled from research monographs, scientific and research articles from international journals, Samhita granthas, Sangraha granthas, contemporary literature and from personal experiences.

Introduction

Shweta Chandana (Santalum album) is commonly utilized in cosmetics and in the management of skin disorders and diseases pertaining to urinary tract. Heartwood and essential oils are commonly used in clinical practice.^{1,2} Chandanasava, Chandana lepa, Chandanadi taila and Chandanadi louha are very frequently used in clinical practice. As it is having good odor, and cooling effect on the skin, it is used in cosmetic also. ^{3,4,5}.

Rasa - Tikta, Madhura.

Guna - Laghu, Rooksha.

Veerya - Sheeta

Vipaka - Katu

Doshagnata - Kapha pitta shamaka

Rogagnata - Daha, Kushtha (Skin disease), Ati swedajanya dourgandhya, Trishna, Amlapitta, Kamala, Raktavikara, Raktapitta, Shweta pradara, Rakta pradara, Shukra meha, Mootra krichchra, Mootra daha, Pooyameha, Angamarda, Basti shotha, Paittika shirahshoola, Anxiety neurosis. ^{6,7,8}.

Karma - Daha prashamana, Dourgandhya hara, Twag dosha hara, Medhya, Pitta hara, Soumanasya janana, Trishna nigrhana, Rakta shuddhi kara, Rakta pitta hara, Shleshma pootihara, Mootrala, Mootramarga shothahara, Sweda janana, Kushthaghna, Jwarahara, Vishaghna, Angamarda prashamana, Shamaka. ^{9,10,11}.

Actions and Uses

The essential oil and heartwood yielded from it are bitter, cooling, acrid, deodorant, blood purifier, intellect promoting, analgesic, expectorant, cardiogenic, diuretic, tonic, antipyretic and haemostatic. Chandana (Santalum album) is used in haemorrhoides, irritable bowel syndrome, excessive thirst, umbilical inflammation, hiccup, hyperacidity, burning sensation, burning micturition, foul odor due to excessive sweating, loss of memory, skin diseases, amnesia, leprosy, urticaria, chronic cough, haemoptysis, cystitis, gonorrhoea, oligomenorrhoea, spermatorrhoea, dysuria, gout, dysmenorrhoea and leucorrhoea. ^{12,13}.

Clinical indications ¹⁴.

1. Mootradaha
2. Mootrakrichchra
3. Herpes zooster
4. Herpes simplex
5. Chickenpox
6. Erysepalus
7. Tinea capitis
8. Tinea corporis

9. Tinea cruris
10. Scabies
11. Paronychia
12. Cracked feet
13. Psoriasis
14. Contact dermatitis
15. Eczyma
16. Furunculosis
17. Cellulitis
18. Chronic non healing ulcer
19. Chronic venous ulcer in the leg
20. Folliculitis
21. Achne vulgaris
22. Stomatitis
23. Gudadaha
24. Abcess in the skin

Amayika prayoga

When given with disease specific adjuvant drugs, Chandana shows desired results. In Mootra daha, Chandanasava is given with Gandhaka rasayana tablets and Chandraprabha vati. In Mootrakrichchra roga, Chandanadi loha is given with Chandanasava and Sarivadyasava. In Herpes zoaster infection, Chandanasava is given with Sarivadyasava and Godanti bhasma with anupana of tender coconut water. In Herpes simplex, similar medicines are found effective. In Chicken pox patients, Chandanasava is given with Mrutyunjaya rasa. In Erysepalus patients, Chandanasava is given with Pravala panchamrita rasa or Kamadugha rasa with Mouktika or Pravala pishti. In Tinea capitis, Tinea corporis and Tinea cruris patients, Chndanasava is given with Maha tiktaka kashaya and Chakramarda taila external application. In Scabies (Pama) patients, Chandanasava is given with Gandhaka rasayana tablets and Gandhakarpoola malahara external application. In Paronychia (Kunakha), Chandanasava is given with Triphala guggulu and Gandhaka rasayana tablets. Externally Tankana bhasma can be applied. In cracked feet, Chandanasava is given with Sarivadyasava and external application of Vaslene. In Psoriasis patients, Chandanasava is given along with Maha manjishtadi kashaya and application of Stri Kutaja taila or Dina mallika taila. In patients of Contact dermatitis, Chandanasava is given with Maha tiktaka kashaya or Guggulu tiktaka kashaya, Arogyavardhini rasa and external application of Bruhanmarichyadi taila or Nalpamaradi taila. In Furunculosis, Triphala guggulu and Gandhaka rasayana tablets are given with Gandhakadya malahara external application. In Cellulitis patients, Chandanasava is given with Kamadugha rasa with Mouktika, Pravala panchamrita rasa and Pravala pishti. In patients of chronic non healing ulcers, Chandanasava is given with Patola katurohinyadi kashaya, Arogyavardhini vati, Triphala guggulu and external application of Tankana sindoora. In patients of chronic venous ulcer of the leg, similar medicines are effective. In folliculitis patients, Triphala guggulu is given with Chandanasava. In patients of Mukha dooshika (Achne vulgaris), Kumkumadi lepa externally and Chandanasava with Patola katurohinyadi kashaya is effective. In patients of Stomatitis, Malati Patra swarasa with Chandanasava and external application of Yashti madhu choorna is found effective. In Guda daha patients, Kamadugha rasa with Mouktika, Triphala tablets and Chandanasava are effective. In skin abcess patients, Pancha tikta ghrita guggulu, Gandhaka rasayana

tablets and Chandanasava are given. Chandanadi louha, Chandraprabha vati are given with Chandanasava in UTI and Mootra daha patients. In skin infections also Chandanadi louha is effective.

Formulations

Bruhat marichyadi taila, Madhyama narayana taila, Maha lakshadi taila, Vyaghri taila, Angamarda prashamana kashaya choorna, Kutajashtaka choorna, Chandanadi loha, Chandanasava, Ashwagandha taila, Chandanadi taila.

Pharmaceutical actions

Antigonorrhoeal, gastric mucin augmenting activity, antibacterial, antiviral, chemopreventative and antifungal.

On skin cancer

Mechanistic study showed an involvement of caspase- 3 activation and poly (ADP ribose) polymerase cleavage and disruption of the mitochondrial membrane potential and cytochrome C release into the cytosol, thereby suggesting involvement of both caspase dependant and independent pathways.

The extracts of Indian medicinal plants including Santalum album were examined for their possible regulatory effect on Nitric oxide (NO) levels using Sodium nitroprusside as an Nitric oxide donor in vitro. Most of the plant extract demonstrated dose dependant scavenging on Nitric oxide and exhibited significant activity.

Conclusion

1. Chandana (Santalum album) is given in the management of various skin and urinary disorders effectively.
2. It is usually given in the form of combinations.
3. There were least adverse drug reactions after the administrations of this drug.
4. Chandana lepa is Soumanasya janana and utilised in cosmetics also.

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