

SUMMARY

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The frame of the dissertation work entitled “Evaluation of the Rasāyana effect of Kruṣṇa Tila (*semen sesami nigrum*) – A Clinical Study” is designed in five sections viz.

- Literary review
- Drug review
- Methodology – Observations & Results
- Discussion
- Summary & Conclusion

The present study was undertaken with following aim and objectives:

Aim:

1. Study the Rasāyana effect of Kruṣṇa Tila in improving the health status.

Objectives:

1. Study in detail about Kruṣṇa tila.
2. Study the commonly occurring minor complaints of health and early ageing.
3. Understanding the concept of Rasāyana therapy and its practical utility to maintain and improve health status.

The literary review consists of overall view of the concept of Rasāyana and its therapeutics utilities from the Ayurvedic point of view as well as the understanding of Rasāyana from modern point of view. Historical review brings us the information about the Rasāyana since Vedic period and from different branches of medicine existing in past. The Rasāyana review comprises an elaborate coverage of the concept with description about etymology, definition, classification of Rasāyana and

understanding of Rasāyana for Swastha i.e. healthy individuals. The Rasāyana review from modern science deals with the understanding in detail of Rasāyana and its mechanism of action on various systems of the body at different levels. The literary review also elaborates concept of ageing and methods to overcome the same.

The second section comprises of drug review with detailed description of drugs under trial. Description about the Dravya used in trial, family, Latin names, Rasa, Virya, Vipaka, Karma of the Dravya as per Ayurvedic classics is mentioned. A detail regarding the constitution of the drug in terms of its chemical composition has been elaborated. Analyzing the Ayurvedic Classics and references regarding the drug from other contemporary sciences has been discussed, explaining composition of the drug and its uses in different condition.

The third section deals with the clinical study comprising the method of study, study design, drug intervention details, and selection of patients, assessment criteria, observations and results obtained from the study.

A clinical study with pre-test and post-test design where in 100 patients fulfilling the inclusion criteria of either sex between the age group of 40 to 60 years were selected for the study.

Patients were administered Kruṣṇa tila 10gm daily morning on empty stomach along with water to be chewed by the patients for a total period of 90 days

Patients were followed once in 15 days for a period of 03 months. After completion of the treatment, effect of therapy on each and every sign and symptoms was recorded and analyzed statistically.

Results obtained after completion of therapy are presented after statistical analysis.

Present study shows Kruṣṇa tila had significant relief in symptoms of Abhyavaharan shakti, Jāraṇa shakti, Twak parushata, Slatha asthi, Slatha sandh & Khalitya. Lakshana of Nidrā did not show any significant changes.

The readings of *Quetelet's Index*, Muscle Index, and Lorenz's Constitutional Index suggest that the nourishment property of Kruṣṇa tila may be at micro level, as it is rich in micro nutrients like vitamin E, vitamin B, iron, zinc, magnesium etc. as there was no significant relief observed in body mass or muscle mass based on these parameters. Interpretation of results is done in the fourth chapter of discussion.

Statistical analysis of total effect of therapies reveals that administration of Kruṣṇa tila showed Rasāyana effect of the drug by improving the Agni thereby restoring normal function of Srotas and providing micro-nutrition to the body.

CONCLUSION

CONCLUSION

The present study “*Evaluation of The Rasāyana Effect of Kruṣṇa Tila (Semen Sesami Nigrum) - A Clinical Study*” was undertaken with 100 patients. Patients were administered the research drug i.e. Kruṣṇa tila (*Semen Sesami Nigrum*). Following conclusions are drawn from the clinical study.

1. Early ageing & old age problems are at rise, for which Ayurveda exclusively has answer to maintaining & promotion of positive health through Rasāyana.
2. In the present study majority of patients i.e. 68 patients were between age group of 40-50 years and 54 patients were having vāta dominant prakruti or vāta associated prakruti. These observations highlights the occurrence of early ageing signs in the population and vāta being important doṣa involved, as truly stated in samhita’s about vāta predominance in later ages of life.
3. In Vāgbhata saṃhitā’s i.e. Aṣṭāṅga Saṃgraha & Aṣṭāṅga Hṛdaya use of Kruṣṇa tila as Rasāyana has been indicated. Kruṣṇa tila i.e. black sesame is preferable used for medicinal purpose.
4. Black sesame seeds are rich in calcium, iron, copper, magnesium, phosphorus. These minerals help to support healthy bones, muscles, blood, and nervous system. Copper strengthens blood vessels, joints, and bones, and is helpful in relieving arthritis. Magnesium supports vascular and respiratory health.

5. In the present study observations revealed significant relief in symptoms of Abhyavaharan Shakti (64.12 %), Jāraṇa shakti (68.42 %), twak parushta (61.52 %), khalitya (70.83 %).
6. Similarly there was significant relief recorded in symptoms of Slatha asthi (61.54 %), Slatha sandhi (52.27 %).
7. In relation to the observations of *quetelet's index*, *muscle index* and *lorenz's constitutional index*, the results did not show any significant changes in them.
8. The observations in the parameter of Nidrā after completion of research did not reveal any significant results.
9. It is assumed that different Rasāyana drugs may act with predominance effect at different levels like Agni, Dhatu and Srotas.
10. The Rasāyana effect of Kruṣṇa tila can be seen at the agni level i.e. katu, tikta rasa and ushna virya helps in improvement of agni (digestion & metabolism), sukshma and yogvahi gunas of Kruṣṇa tila helps supply of various micro nutrients like zinc, calcium, magnesium, vitamin E, lignans (antioxidants) etc. to each and every cell of the body, justifying the mode of action of Rasāyana dravyas.
11. Present study shows Kruṣṇa tila had significant relief in symptoms of Abhyavaharan shakti, Jarana shakti, Twak parushata, Slatha asthi, Slatha sandhi which may be due to the Madhura, snigdha, guru guna and yogvahi properties of drug.
12. Similarly Snigdha guna and ushna virya helps in pacifying vāta doṣa which is predominant in matured age groups.