

REVIEW ON SATVA KALPANA

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ABSTRACT

Ayurveda pharmaceuticals have two aspects Rasashastra and Bhaishajya kalpana. Ayurveda Pharmaceuticals deals with designing of formulations by employing drugs of different origin. Herbs, minerals, metals, marine products, etc. are used in formulations. The latter mainly deals with preparation of formulation using herbal drugs. Satva kalpana is one such dosage form where water extractable solid substance is collected. It is a simple preparation with abundant therapeutic efficacy. The dose of it is less with shelf life of two years. A literary review of books and open accessed articles give a brief note on this formulation. Only a few satva kalpas (satva formulations) are found in literature of Ayurveda. Researches also done on these are few. This article throws light on this unique pharmaceutical preparation.

KEYWORDS: Satva, Guduchi satva, water extract, Yavani satva.**INTRODUCTION**

With herbs alone various kalpanas (formulations) are made like swarasa (juice), kalka (paste), kwatha (decoction), hima (cold infusion), phanta (hot infusion), avaleha (confectionary), etc. One such formulation is satva kalpa. Satva kalpa is a formulation prepared with single drug without any heat. Satva are the water soluble solid extracts that have therapeutic efficacy. Usually satva preparation is done with drugs that are rich in starchy content.

Definition: Satva is a water extractable solid substance collected from a drug.^[1]**Method of extraction:** The drug is cut into small pieces, macerated in water, filtered and the water is kept overnight. Then it is strained through a cloth and the solid matter is allowed to settle. The supernatant liquid is decanted and the satva is washed by repeating the process by adding water and decanted. The satva so sedimented is allowed to dry and preserved.^[2]**Preservation & Character:** This satva can be preserved in a closed container. The colour varies from drug to drug.^[3]**Test of perfectness:** For Guduchi satva it is said to be the colour of shuddha shankha (conch shell).Few satva explained in texts books of Ayurveda pharmaceuticals are Guduchi satva (*Tinospora cardifolia*), Chirayata satva (*Swertia chirata*), Ardraka satva*(Zingiber officinale)*, Kutaja satva (*Holarrhena antidysenterica*), etc.**Guduchi Satva^[4]:** It is useful in Jwara (fever).**Yavani Satva (*Trachyspermum ammi*).**^[5]Yavani satva (Thymol) is a crystalline phenolic component, chemically 2-isopropyl-5-methylphenol obtained from the volatile oil of *Thymus vulgaris* (L) and *trachyspermum ammi* (L).

It is described to be a colourless, crystalline powder, odour pungent and aromatic, thyme like taste, pungent and aromatic. The dose is 25-125 mg, it has Katu (pungent), Tikta (astringent) rasa, Laghu (light), Ruksha (dry), Teekshna (sharp) in guna, ushna veerya (hot in potency) and katu in vipaka.

It has Deepana (increases appetite), Lekhana, Pachana (digestive), Shleshmaghna (pacifies kapha), Shulaghna (analgesic), Uttejaka, Vatanulomana, Vedana shamaka (reduces pain), Vishaghna (anti-toxic) action.

Therapeutic uses: Ajeerna (dyspepsia), amavata (rheumatism), anaha (distension of abdomen), krimi, aruchi (tastelessness), balatisara (infantile diarrhoea), chardi (emesis), dantashula (toothache), gulma (abdominal lump), krimi (helminthiasis), mutrakrichhra (dysuria), pleehodara (splenomegaly), sandhishula (joint pain), shirashula (headache), twak roga (skin disease), udara (disease of abdomen), udarashula (pain in

abdomen), vatarsha (dry piles), visuchika (gastroenteritis with piercing pain).

Peppermint Satva (Menthol)^[6]

Peppermint (*Mentha balsamea*) satva is the natural laevo-rotatory menthol obtained from various species of mentha.

This satva is Tikta (astringent), Katu (pungent) in Rasa, Teekshna (sharp), Snigdha (unctuous), Laghu (light), Vishada in Guna, Ushna (hot) in Veerya and Katu (pungent) Vipaka and given in dose of 10-30 mg. It is Deepana (increases appetite), Kaphahara (pacifies kapha), Mukha shodhana (clears mouth) in action.

It is indicated in Ajeerna (dyspepsia), dantashula (toothache), jeernajwara (chronic fever), kaphaja vikara (disorders due to kapha dosha), mukha roga (diseases of the mouth), udarashula (pain in abdomen), shula (pain/colic) and vrana (ulcer).

Chirayata Satva^[7]

This satva is useful in all types of jwara especially in jeerna jwara (chronic fever), vishama jwara, pittaja jwara in a dose of ½ masha- 2 masha (½-2 g) with water.

Kutaja Satva^[8]

It is useful in Atisara (diarrhoea), amadosha, sangrahani, dose is 4 ratti (500mg) and administered with Dhanyaka kwatha, Shatapushpa arka, Takra (buttermilk).

Ardra satva^[9]

It is useful in conditions of agnimandya (dyspepsia), udarashula (abdominal pain), adhmaana (flatulence), pratishyaya (rhinitis), kasa (cough), shwasa (asthma), jwara (fever), amavata (rheumatic disorder), vatavikara, ajeerna (indigestion), visuchika (gastroenteritis with piercing pain), and diseases like shotha (inflammation), yakrut pleeha (diseases of liver and spleen), bastishula (baldder), etc. The dose is 1 masha to 3 masha (1-3 g) with water, takra (buttermilk), sura, etc.

Researches on Satva kalpana

A research carried out on yield of Guduchi satva concludes that maximum yield of satva is obtained from small size of the stem and suitable season is winter season (January).^[10] A study carried on the Physicochemical evaluation of Satva extracted from male and female plants of Guduchi has put light that the yield of Satva from male and female stem was 2.25% and 3.18% respectively. Thus the female variety was suggested to be chosen to obtain more Satva. The organoleptic characters and functional groups were found to be same in both samples. The extractive values (water soluble extractive and methanol soluble extractive) and total alkaloid contents were found to be higher in Satva obtained from female variety.^[11]

A research on Pharmaceutical Study of Guduchi Satva using the Advanced Technology-Multi Mill, a modern

instrument, has proved to be beneficial for getting the maximum yield of satva under hygienic conditions.^[12]

A study on the quality control evaluation of Guduchi satva has said after analysis that Guduchi Satva contains more or less starch granules and few alkaloidal phyto-constituents.^[13]

A research on Guduchi satva on standardization has concluded that the analytical studies of Guduchi Satva don't show any significant difference in the market sample and prepared Guduchi satva. But microscopic study had shown the difference in starch grain size and no other difference significantly. This has thrown light that there was a lot of adulterant in the market sample, and also showed that the Guduchi starch differs significantly from wheat and maize starch.^[14]

An experimental study of Guduchi satva on Hypoglycemic and anti-hyperglycemic activity of Guduchi Satva in experimental animals has concluded that it has mild hypoglycemic activity while it does not have a significant anti-hyperglycemic activity against glucose overload.^[15]

DISCUSSION

Satva kalpana is a water extractable solid preparation. The content of the drug is extracted with water as a medium. Though references of a few satva kalpana are found in texts of rasashastra only works on Guduchi satva are found, thus leaving scope for research. The preparation is easy to perform. Many research works have been carried out on Guduchi satva on pharmaceutical study, analytical, standardization and experimental study.

CONCLUSION

Satva kalpana is a unique preparation that extracts the water extractable solid content of the drug. Guduchi satva is a formulation on which various researches have taken place. Standardization of satva, analytical and experimental studies have been carried out on it. Satva of very common and simple drugs are explained on which future researches can be carried out.

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