

Review article

Review on Pharmacokinetic and Pharmacodynamic action of *Sutshekhhar Ras*

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ABSTRACT:

Now a days many of the peoples are suffering from digestive disorders, in which *pitta* is main factor for various diseases related to digestive system. *Sutshekhhar Ras* is popular formulation which is used by many of the Ayurvedic practitioners for day to day practice. Here we trying to write a hypothetical view on *Sutshekhhar Ras* as pharmacokinetically & pharmacodynamically that how the *Sutshekhhar Ras* acts on different stages of *samprapti* of certain selected diseases which are stated in *phalshruti*¹ of *Sutshekhhar Ras* and which symptoms are reduced by *Sutshekhhar Ras*.

KEY WORDS: *Sutshekhhar Ras, Amalpitta, Gulma, Grahani, Atisar, Vantishool*

INTRODUCTION:

Sutshekhhar Ras is described in *Yogratnakar*² under *Amalpitta* disease *rogadhikar* which is popular formulation used by many of the Ayurvedic practitioners. In the *Phalashruti* of *Sutshekhhar Ras*, *Yogratnakar* described the following diseases like *Amlapitta, Vantishool, Panchgulma, Panchkas, Grahani, Tridoshaj atisar, Shwas, Mandagni, Ugra hikka, Udavarta, Rajyakshma*. Also *Yogratnakar* stated that if we consume *Sutshekhhar Ras* for continue 18 days then it will becomes *sarvarogahar* for us. So in this article I will put hypothetical view on explaining how *Sutshekhhar Ras* would work in certain selected diseases. In short review a pharmacokinetic & pharmacodynamic action of this drug will be discussed.

MATERIALS AND METHODS:

In *Yogratnakar*, *Sutshekhhar Ras* is explained. *Shuddha Parad, Suvarna Bhasma, Tankan, Vatsnabh, Shunthi, Dhattur Beej, Shuddha Gandhak, Tamra Bhasma, Twak, Tamalpatra, Ela, Nagkeshar* are the ingredients of *Sutshekhhar Ras* and *Bhavana of Bhrungraj swaras* is given. This is a *khalviya rasayan kalpa*. It is useful for the breaking of specific *samprapti* stages and to reduce symptoms and suffering. To enhance the potency and *Gamitva* of drug it is given with ginger juice and honey in *kaphapradhan dosha*, with milk and sugar in *pittapradhan dosha*, and with ghee and sugar in *vatpradhan dosha* as *Anupana*.

We have used *Samhitas* & previous articles³ which are published for reference purpose.

Study design -

1. Pharmacokinetic action of *Sutshekhhar Ras*.
2. Pharmacodynamic action of *Sutshekhhar Ras*.

Dose - 2 *Gunja* (nearly 250mg), Route of Administration - Oral.

Review and study on Pharmacokinetic action of *Sutshekhhar Ras* -

The *Ras, Vipaka, Virya, Gun* and *Karma* as pharmacokinetics of drug are separately explained in [Table No 1].

Review and study on Pharmacodynamic action of *Sutshekhhar Ras* -

Amalpitta

In *Amalpitta* all the three *Dosha* are vitiated, but in that *Pitta* is predominant. Because of this *Agnimandya* occurs and even after this if *Apathya* continues food becomes more *Vidagdha* and *Amla Guna* of *Pitta* increases and food becomes *Amla*. Because of this *Amla* food more *Vidagdhata* occurs and *Pitta* becomes more vitiated. And this *Vishchakra* continues.⁴

To treat *Amalpitta*, *Acharyas* has mentioned the drugs, which are having mainly *Katu*, *Tikta*, *Madhur Ras*, *Sheet Virya*, *Katu Vipaka* and *Ruksha* properties. Most of the drugs of *Sutshekhar Ras* are *Tikta*, *Kashaya* and *Madhur Ras pradhan* properties. *Tikta*, *Kashaya* and *Madhur Ras* are *pitta shamak*. *Madhura rasa* counteracts the *tikshan guna* of vitiated *pitta* causing smoothening effect, promotes strength and pacifies *vata pitta doshas* and also relieves *daha* (burning sensation). In *Amalpitta* *Mandagni* leads to *Ama* formation. *Pippali* is best medicine for *Amapachan*. All the drugs have *Deepan*, *Pachan* properties which improve the status of *Agni*. *Shankha Bhasma* and *Tankan* have a *Kshariya* in nature which reduce *Amliyata* (acidic nature) thus neutralize the acidity and maintain acid base balance in stomach.

Vanti -

Due to *viruddha aahar vihar* etc. reasons vitiation of *tridosh* occurs. *Tikshana* and *ushna gunas* of *pitta* are main causative factors of *aamashay kshobh*. *Vat* becomes *pratilom*. Food from stomach, all secretions and vitiated *pitta* and *kaph* these all are expelled out from oral cavity due to gained *uradhwa gati* because of *vyan* and *udan*.⁵

As stated above in *Amalpitta*, *Sutshekhar Ras* reduces the *Tikshana* and *ushna gunas* of *pitta* and due to *vatanuloman karma* of *Twak*, *Ela* and *Bhrungraj*, *uradhwa gati* of *vat* becomes normal which helps to reduce the main *samprapti* of *vanti*.

Shool -

Due to *mitthya ahar vihar* vitiation of *vat* occurs and because of this irritation of *annavah strotas* occurs. Soft *aavaranas* of organs get injured and organ becomes stretched. In these organs *kamp lakshans* are observed. Peristaltic movement which is required for digestion is hampered. Because of this *toda lakshan* is seen. Pain occurred due to *vat* is *sanchari*.⁶

Because of the *pidashamak guna* of *shuddha vatsanabh* the pain gets reduced. *Vatsanabh* is *tridosh shamak* which reduces *vatprakop* which is main reason for *shool*.

Gulma -

In the *samprapti* of *Gulma* on one side *Vatprakop* occurs while on another side due to *kaph* and *pitta* vitiation *strotorodh* occurs.⁷ Due to these 2 stated factors *Utpatti* of *Gulma* occurs. In this, drugs of *Sutshekhar Ras* are *tridoshaghna* and all drugs are having *gunas* like *laghu*, *ruksha* and *ushana virya*. *Vishadravyas* like *Vatsanabh* and *Dhatur beej* removes *strotorodha*. In this way it helps to break down the *Samprapti* of *Gulma*. From the *Lakshanas*, *Aruchi lakshan* is reduced due to *Deepan guna* of *Twak*, *Tamalpatra*, *Ela* and *Nagakeshar*, etc. and painful voidation of *Mala-mutra-vata* & *aanah* is reduced due

to *vatanulomak karma* of *Twak*, *Ela* & *Bhrungaraj*. In this way *Sutshekhar Ras* is helpful in *Gulma*.

Kasa -

In *Kas*, *strotorodha* occur due to *Kaphaprakop*⁸, is reduced due to *gunas* present in *Sutshekhar Ras* that is *Laghu*, *Ruksha* & *Ushana guna*. Due to *Vatprakop*, *Urdhwagaman* of *Aapan vayu* occurs in *Kas*, this *Urdhwagaman* is reduced due to *Vatanulomak karma* of *Twak*, *Ela* & *Bhrungaraj*. Because of this, work of other *Kasaghna aaushadhis* becomes more easier when they are used along with *Sutshekhar Ras*.

Grahani -

Sutshekhar Ras reduces *Aganimandya*, which is main causative factor of *Grahani*⁹ because of *Deepan guna* of *Twak*, *Tamalpatra*, *Ela* and *Nagakeshar*, etc. and if used after formation of *Shuktapak* due to *Aganimandya* it is useful by *Pachan guna* of *Shunthi*, *Twak*, *Ela*, *Nagakeshar*, *Bhrungaraj*. It is useful in *Bahudravamalpravrutti* because of *Grahi guna* of *Shankha bhasma* & *Bilwamajja*. The pain present at umbilical region is reduced due to *pidashamak guna* of *shuddha vatsanabh*. Due to the *Balya guna* of *Suvarna bhasma*, *Parad* & *Gandhak*, it reduces *Dourabalya* and helps in *Balaprapti*. The drug *Bhrungraj* works on *Pittadhara kala*, it improves the digestive work, because of this property *Bhrungraj* plays important role in *Grahani*.

Atisar -

The drugs present in *Sutshekhar Ras*, i.e. *Twak* which is *Alpgrahi* & *Stambhak* and *Bilwamajja*, *Shankh bhasma* which is *Grahi gunatmak* helps in *Atisar*. The drug *Bhrungraj* works on *Pittadhara kala*, it improves the digestive work, because of this property *Bhrungraj* plays important role in *Atisar*¹⁰ also. Dehydration & electrolyte imbalance occurred due to *Atisar* is improved by *Tankan* in some extent. The chemical formula of *tankan* is $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10 \text{H}_2\text{O}$, because of this it plays important role in reducing electrolyte imbalance and because of that it reduces the *pindikodweshthan lakshan* (calf muscle pain).

Shwas -

In *Shwas* *Sutshekhar Ras* helps to reduce vitiated *Kapha* and *Ama* in *Samprapti*.¹¹ *Ruksha*, *Ushna*, *Katu*, *Tikta Ras Gunas* of *Sutshekhar Ras* helps for *Amapachan*. The work of *Sutshekhar Ras* is less in *Shwas* as compared to others.

Other -

In *Hikka* and *Udavarta*, *Bhrungraj*, *Ela* and *Twak* helps for *Samprapti Bhang* by its *Vatanulomak Karma*. *Sutshekhar* acts on *Mandagni* by its *Deepan Pachan Gunas*.

OBSERVATION AND RESULTS:

In case of *Amalpitta*, *Tikta*, *Kashay* & *Madhur Ras* of *Sutshekhar Ras* are *Pittashamak*, *Madhur Ras* reduces *Tikshna Guna* of vitiated *Pitta* & relives *Daha*. *Pippali* helps in *Amapachan*. *Shankha Bhasma* & *Tankan* reduces the *Amliyata* & all other drugs do *Deepan* and *Pachan Karma*.

In case of *Vanti*, *Sutshekhar Ras* reduces the *Tikshna* and *Ushna Gunas* of vitiated *Pitta* & it's *Vatanulomak* property helps in regain the *Prakrut Gati* of the *Vayu*.

In case of *Shool*, *Sutshekhar Ras* helps to reduce pain by *Pidashamak Guna* of *Shuddha Vatsanabh*.

In case of *Gulma*, *Sutshekhar Ras* reduces the *vatprakop* by it's *Tridoshghna* property & removes *Strotorodh* by *Vishdravyas* like *Vatsanabh* and *Dhattur Beej*.

In case of *Kasa*, *Sutshekhar Ras* removes the *strotorodh* by reducing vitiation of *Kapha* & also it repairs the *Urdhva Gati* of *Vata* by *Vatanuloman*.

In case of *Grahani* & *Atisar*, it works by it's *Deepan Pachan Guna* as well as by *Grahi* and *Stambhak* properties. Also the *Brungaraj* plays major role in *Grahani* & *Atisar* because it directly works on *Pittadhara Kala* & improves it's function. *Suvarna Bhasma*, *Parad* & *Gandhak* reduces *Dourbalya* in both the diseases.

In case of *Shwas*, it reduces the *Kapha* & *Ama* because of it's overall *Karma*. In *Hikka* & *Udavart* it works by *Vatanulomak Karma* & helps to relive sufferings.

In this way, although *Sutshekhar Ras* comes under *Rogadhikar* of *Amlapitta*, it works on disease which are stated in *Phalashruti* of *Sutshekhar Ras* as explained above in our opinion.

DISCUSSION:

Sutshekhar Ras is described in *Yogratnakar* under *Amlapitta Rogadhikar*. It comes under *Shamak Chatushka*. Most of the drugs of *Sutshekhar Ras* are *Kashay*, *Tikta* & *Madur Rasatmak* with *Laghu*, *Ruksha Guna* & *Ushna virya*. They are having properties like *Vatanuloman*, *Deepan*, & *Pachan*. Hence they are useful in various diseases like *Amalapitta*, *Shool*, *Vanti*, *Panchkasa*, *Panchgulma*, etc. To enhance it's properties & *Gamitva* *Ginger juice*, *honey*, *sugar milk*, etc are given as *Anupan*. In this article we tried to explain how the *Sutshekhar Ras* works in above stated diseases which is our hypothesis.

CONCLUSION:

Sutshekhar Ras is commonly used drug preparation which is used for *Pittapradhan* & *Strotorodhajanya* *Vyadhis*. *Sutshekhar Ras* can be used in *Amalapitta*, *Vanti*, *Shool*, *Panchakas*, *Panchgulma*, *Grahani*, *Atisar*,

Shwas, *Hikka*, *Udavart*, *Mandagni* in specific *Avastha*. *Sutshekhar Ras* correcting the vitiated state of *Pitta* improves the whole digestion process & results in proper functioning of *Agni*. Conceptually it is concluded that the substances having properties like *Ruksha*, *Laghu*, *Katu* & *Ushna* has the effect to decrease the vitiated *Dravyaroop* of *Pitta* & maintain the proper functioning of *Agani*. All *Karmas* related to *Chikitsa* are in one dosage form like *Vyadhipratyanik Dravyas* & *Yogavahi Dravyas*. As described here the hypothetical study, clinical study is needed to find efficacy of *Sutshekhar Ras*.

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Table No. 1: Ras, Vipaka, Virya, Gun and Karma of Dravyas.

Sr. No.	Drug name	Rasa	Vipak	Virya	Guna	Karma
1	Shudha Parad ¹²	Shadrasa			Yogavahi	Balya
2	Suvarna Bhasma ¹³	Madhur	Madhur			Balya, Sarvaroghar
3	Tankan ¹⁴	Kshariya		Ushna	Ruksha, Tikshna	Agnideepak, Hrudyaya
4	Vatasabha ¹⁵	Katu, Tikta	Madhur	Ushna	Laghu, Ruksha	PidaShamak, Vyavai
5	Shunthi ¹⁶	Katu	Katu	Ushna	Laghu, Snigdha	Pachan, Grahi
6	Marich ¹⁷	Katu	Katu	Ushna	Laghu,	Deepan
7	Pippali ¹⁸	Katu	Madhur	Ushna	Laghu, snighadha	Deepan
8	Dhatuur Beeja ¹⁹	Katu, Tikta	Katu	Ushna	Laghu, Ruksha	Shwasaghana, Jwaraghna
9	Gandhak ²⁰	Katu, Tikta, Madhur	Katu	Ushna	Laghu, Ruksha	Rasayan, Aamnashak
10	Tamra Bhasma ²¹	Katu, Tikta, Kashaya	Madhur	Ushna		Lekhan
11	Twak ²²	Tikta	Katu	Ushna	Laghu, Ruksha	Vaatanuloman, Alpagrahi, Balya, Deepan, Pachan, Stambhan
12	Tamalpatra ²³	Madhur	Katu	Ushna	Laghu, Ruksha, Tikshna	Deepan
13	Ela ²⁴	Katu	Katu	Ushna	Laghu, Ruksha	Deepan, Pachan, Vaatanuloman
14	Nagkeshar ²⁵	Kashaya	Katu	Ushna	Laghu, Ruksha	Aampachak, Sangrahi, Deepan
15	Shankbhasma ²⁶	Kashaya, Katu, Kshariya	Katu	Ushna	Ruksha, Shita	Grahi
16	Bilwa Majja ²⁷	Kashaya, Tikta		Ushna	Ruksha, Laghu	Grahi, Deepan, Pachan, Balya
17	Kachora ²⁸	Katu, Tikta	Katu	Ushna	Laghu	Deepan, Hrudyaya
18	Maka (Bhrungaraj) ²⁹	Katu		Ushna	Ruksha, Tikshna	Deepan, Pachan, Vaatanuloman, Rasyan, Balya.

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