

A Critical Review on Sameera gaja keshari rasa-

Praveen kumar¹ Sharad M.Porte² Dharmendra choudhary³.

¹PG Department of Agadtantra, national institute of Ayurveda Jaipur, Raj., india.

² Associate Professor, PG Department of Agadtantra, national institute of Ayurveda Jaipur, Raj., india.

³ PG Department of Shareera rachna, national institute of Ayurveda Jaipur, Raj., india.

1. Abstract-

Sameera gaja keshari rasa is an Ayurvedic drug mentioned in *Ras tantra sara and sidha prayoga samgraha*. The main Content of *Sameera gaja keshari rasa* is the opium along with maricha, purified kuchla and purified shingula indicated in opium addiction. The main contents of *Sameera gaja keshari rasa* is purified opium having *Vednashamask*, *vataroga nashak*, *akshephara*, *atisara nashak proprieties* and its provides the maintenance dose in opium withdrawal like methadone. The *Kupilu* calm down the withdrawal effect of opium on which having properties like *vata-shamak*, *chitta-avasadahar* (antidepressant properties) and *hridaya daurbalyahar* (cardiac tonic). The pharmacological preparation of *Kupilu* calm down the withdrawal effect of opium like anxiety and agitation by its *Chitavsadhar* property and Running nose, Diarrhea by its *Grahi* property, muscular pain and Joint Pain by its *vatshamak* property. All these drugs are having mainly *katu-tikta rasa*, *ruksha*, *ushna*, *tikshna gunaas*, *ushna virya* and *vata kaphagna doshaghnata*¹.

2. Keywords- *Sameera gaja keshari rasa*, *kuchla*, opium addiction.

3. Introduction-

In *Ayurveda Aushadhi* is considered one of the important component out of four essential component of *chikitsa chatuspadas*. Treatment is not possible in absence of any of the four components. *Acharya charaka* has emphasized, the awareness of therapeutic drug by considering it as one among *trisutra* i.e. *hetu, linga and Aushadhi of Ayurveda*. *Acharya charaka* say that the physician who knows the science of admistration of drugs with due reference to the place and time and who applies it only after examining each and every patient individually is excellent physician².

The term drug is derived from a French word —Droque- a dry herb. It is the single active chemical entity present in a medicine that is used for diagnosis, prevention, treatment / cure of a disease W.H.O. defines drug as "Any substance or product that is used or intended to be used to modify or explore physiological symptoms or pathological states for the benefit of the recipient." (WHO1966). This definition appears more incompliance with the terms of *Ayurveda*, which aims at the preservation of good health apart from mitigation of diseases.

The ultimate goal of *Ayurveda* i.e. *Prakriti-Sthapana*, can be achieved with the help of proper drug combination. *Acharya Charak* - Nothing in the world exists which does not have therapeutic utility; this shows the importance of drug in our classics.

4. Contents of Sameera gaja keshari rasa³

5.

S.No.	Ingredient	Latin Name/ Chemical name	Quantity	Part used
1.	Shudh Hingula	Mercuric sulphide	1 part	Powder
2.	Maricha	Piper nigrum	1 part	Fruit
3.	Shudh Ahiphena	Papaver somniferum	1 part	Phal niryas
4.	Shudh Kupilu	Strycshnos nuxvomica	1 part	Beej majja

Dose: 30-125mg

Anupan: koshana jal

6. Synonyms of Sameera gaja keshari rasa Ingredient :⁴

S.no.	Drug content	Synonyms
1	Purified opium	Afeem, afukam, amla, chosa, khastila, khaskhas
2	purified kupilu	Kuchla, vishatindu, karaskara, kaktinduka, tinduka, kak piluka
3	Purified hingula	Churnaparada, Mleccha, Sukatunda, Hansapada
4	Maricha	Kalimircha, ushna, kanga, krishna, suvruta,

7. Ganas of Sameera gaja keshari rasa ^{5,6}:

S.No.	Drug Name	Ganas
1.	Purified ahiphena	Madanpal Nighantu- Abhyadi varga Bhav Prakash- Haritakadi varga
2.	purified kupilu	Nighantu adarsh- Vishtindukadi varga Acharya Sushrut- : Aamradi varga
3.	Purified hingula	-----
4.	Maricha	Acharya Charak: Deepniya, krimighna, sirovirechnouopga, Acharya Sushrut: Pippalyadi, Tri-ushna Acharya Vagbhatta: Pippalyadi, Tri-ushna

8. Pharmacodynamic properties (Rasa Panchaka) of Sameera gaja keshari rasa:⁷

S. n.	Drug	Rasa	Guna	Virya	Vipaka	Dosha karma
1	Purified ahiphena	Tikta, kashaya	Laghu, ruksha, sukshma, vyavyi, vikashi	Ushna	Katu	Kaphavatashamak, pittaprapakopaka
2	purified kupilu	Katu	Laghu, grahi, ushna	Ushna	Katu	Kaph-vat shamak
3	Maricha	Shushak-Katu Aadra-Katu	Shushaka-Ruksha, Tikshana	Ushna	Madhur	Kaphvatshamk, agnideepak, swashara, shoolhara
4	Purified hingula	Tikta, Katu and Kasay	Laghu	Ushna	-----	Sarvadosaghn

9. Approximate Rasa Panchaka of Sameera gaja keshari rasa:

1	Rasa	Katu	2	50 %
		Tikta	2	50 %
		Kashaya	2	50 %
2	Guna	Laghu	3	75%
		Grahi	1	25 %
		Ruksha	2	50 %
		Ushna	4	100%
		Tikshna	3	75 %
		Sheeta	0	0%
		Guru	0	0%
3	Virya	Ushna	3	75%
		Sheeta	0	0 %
4	Vipaka	Madhur	1	25%
		Katu	2	50%

5	<i>Doshakarma</i>	<i>Vatahara</i>	3	75 %
		<i>Pittahara</i>	0	0 %
		<i>Kaphahara</i>	3	75 %
		<i>Tridoshhara</i>	1	25 %

Chemical constituents & Karma of *Sameera gaja keshari rasa*⁸

S.n	Drug	Chemical Constituents	Therapeutic Action
1.	<i>Purified Ahiphena</i>	Alkaloids as morphine codien, narcotine, thebain, saponins, tannins catalane.	<i>Balya, grahi, paushtik, sedative, shwash-kash nashak, varishya, Vednashamask, gridharsi, parvashool, asmari, udartsahoola, vataroga, atisar, visuchika, sothahar, sandhishoola, Madkari, vyavayi, vikasi, vedanasthapanana, nidrajanana, akshephara, sthambhana, swas-kasahara, dhatushoshak.</i>
2.	<i>Sudha kupilu</i>	Alkaloids, Indole Alkaloids, Strychnine & Brucine, Monoterpenoid, Glycoside (Loganin), α , β -Colubrine, Vomisine	stomachic, digestive, nervine tonic, anti-rheumatic, aphrodisiac, analgesic, anticollic, antipyretic, astringent, stimulant, antidermatosis, and anthelmintic. Uses in vatavyadhi, rheumatic and mervine disorders, cough, loss of appetite or digestive power, visucika, agnimandya, piles or haemorrhoids, worms affection, general debility, jvara, visamajvara, paralytic disorders, abdominal colic, gout, ulcer, insomnia, cramp, skin disease and senile disorders
3.	<i>Purified hingula</i>	HgS – Red Sulphide of Mercury. it contains 13.8 % sulphur and 86.2 % mercury.	<i>Deepana, Agnivaradhana, Ruchya, Rasayana, Vrisya, Balya.</i>
4.	<i>Maricha</i>	Piperine, piperethine, piperolein A&B, feruperine, cryptone, carotene, ascorbic acid, pipericide,	useful in diarrhea, abdominal pains, strangury, diseases of spleen and abdomen, ascites, tumours, piles, bronchitis, indigestion, constipation and vaginal discharges.

		citronellol, dihydrocarveol.	
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10. Pharmacological action and related previous researches:

1. Kupilu-

Kupilu is a strong stomachic, digestive, nervine tonic, anti-rheumatic, aphrodisiac, analgesic, anticolic, antipyretic, astringent, stimulant, antidermatosis, and anthelmintic. It is recommended in vatavyadhi, rheumatic and mervine disorders, cough, loss of appetite or digestive power, visucika, agnimandya, piles or haemorrhoids, worms affection, general debility, jvara, visamajvara, paralytic disorders, abdominal colic, gout, ulcer, insomnia, cramp, skin disease and senile disorders. In higher or overdose and excess or prolonged use, it is convulscent.

Related researches:⁹

Kuchla use in addiction disorders:

It is used by renowned Ayurvedic doctors such as Prof. Anoop Indoria for the treatment of 1. Opium dependence

2. Alcohol dependence and
3. Tobacco dependence.

The medicines usually used are – Vishatinduk Vati or Shuddha Kuchila in 3 divided doses, along with Hingvastak churna.

Dr Anoop Indoria also uses the leftover milk after Kuchila Shodhana. It is processed to ranular form. This is used in opium dependence as per Rasatantra sara and Siddhayoga Sangraha.

2. Ahiphena-¹⁰

In Ayurveda purified opium is used for balancing the vata and kalpa dosha but increases pitta dosha. Opium is one of the most valuable drugs, Morphine and Codeine, the two principal alkaloids, being largely used in medicine. It is unexcelled as a hypnotic and sedative, and is frequently administered to relieve pain and calm excitement. For its astringent properties, it is employed in diarrhea and dysentery, and on account of its expectorant, diaphoretic, sedative and antispasmodic properties, in certain forms of cough, etc. Small doses of opium and morphine are nerve stimulants. Opium and morphine do not produce in animals the general calmative and hypnotic effects which characterize their use in man, but applied locally, they effectually allay pain and spasm. Owing to the greater excitant action in veterinary patients, the administration of opium does not blunt the perception of pain as effectually as it does in human patients.

Morphine increases the activity and tone of the smooth muscles of gastrointestinal, biliary, and urinary tracts, causing constipation, gall bladder spasms, and urinary retention (Gennaro et al., 1956). In addition, morphine also depresses respiration and causes myosis (Gennaro et al., 1956). Codeine is used as antitussive, analgesic, sedative, narcotic, and antiperistaltic (Gennaro et al., 1956). Thebaine, in low doses, reduces the intraocular pressure, but in higher doses causes convulsions (Gennaro et al., 1956), releases histamine (Yukio, 1957) and initiates vasodilation. Narcotine, used as an anticonvulsant, narcotic, and antitussive, increases the intraocular

pressure (Tóth et al., 1996). Laudanosine, which is used as a spasmolytic (Tóth et al., 1996), has a noticeable contradictory effect to Phenobarbital and causes convulsions. In low doses, this compound reduces intraocular pressure and causes mydriasis (Gennaro et al., 1956). Papaverine is spasmolytic; its chief use is in combating pulmonary embolism by dilating the arteries, allowing blood to reach the obstructed region. In normal subjects, papaverine dilates cerebral vessels. Papaverine is used to treat cerebral ischemia and also increases the intraocular pressure and causes mydriasis. (Gennaro et al., 1956).

2. Maricha¹¹ –

It is widely used in different traditional systems of medicine like *Ayurvedic* and *Unani* System of medicines. Piperine exhibits diverse pharmacological activities like antihypertensive and antiplatelets, antioxidant, antitumor, antiasthmatics, antipyretic, analgesic, anti-inflammatory, anti-diarrheal, antispasmodic, anxiolytic, antidepressants, hepato-protective, immuno-modulatory, antibacterial, antifungal, anti-thyroids, antiapoptotic, anti-metastatic, antimutagenic, anti-spermatogenic, anti-Colon toxin, insecticidal and larvicidal activities etc. Piperine has been found to enhance the therapeutic efficacy of many drugs, vaccines and nutrients by increasing oral bioavailability by inhibiting various metabolising enzyme. It is also known to enhance cognitive action and Fertility. Piperine also found to stimulate the pancreatic and intestinal enzymes which aid to digestion.

Black pepper home remedies

Ghee + Trikatu (Ginger, black pepper, long pepper)+ rock salt, black salt and bida salt – Useful in vomiting due to *Vata Dosha* increase.

❖ Other activities well established based on research:

❖ **Effect of Black pepper and sperm quantity and quality:**

Effect of oral administration (25 and 100 mg/kg body wt/day, for 20 and 90 days) of fruit powder of *Piper nigrum* L. on male reproductive organs of mice was investigated. In mice treated with 100 mg dose for 90 days, degenerative changes were observed in all the tubules. Percentage of affected tubules in testes of Piper-treated mice was dose-and duration-related. Further, *Piper nigrum* treatment for 20 days did not cause appreciable alterations in histological appearance of the epididymis, while the treatment for 90 days caused detectable alterations in the duct.

❖ **Effect of black pepper on hyperthyroidism and diabetes:**

Piperine alkaloid forms 5 – 10 % of chemicals of black pepper. It was evaluated for its thyroid hormone and glucose regulatory efficacy in adult male Swiss albino mice. Its daily oral administration (2.50 mg/kg) for 15 days lowered the serum levels of both the thyroid hormones, thyroxin (T (4)) and triiodothyronine (T (3)) as well as glucose concentrations.

❖ **Black pepper in post partum care**

In every herbal remedies given to the new mother, black pepper is added.

This is to control *Vata Dosha* aggravation that naturally occurs post-delivery.

It is anti toxic – prevents post partum sepsis, infections.

It prevents cold, cough and other Kapha related problems that may occur in the mother.

❖ **Maricha to nullify toxicity:**

Vatsanabha – *Aconitum ferox* is added with 1 part of *Shuddha Tankana* (borax) and 2 parts of *Maricha* (Black pepper) and triturated.

This is the second method of *Visha Marana*.

In most of toxicity due to usage of tubors, black pepper is used.

3. Hingula¹²-

Shuddha Hingula(cinnabar) when judiciously used in the form of suitable compound formulation and in proper dosage is beneficial in all types of eye diseases (Netra Roga Hara), it mitigates all the three vitiated Doshas. It is good appetizer, rejuvenator and aphrodisiac. It is the best remedy for the disorders of liver, pancreas, rheumatoid (arthritis Aamavata), diabetes mellitus (Prameha) and fever, is nutritive, cures spermatorrhoea and leprosy. It is useful in the treatment of Gara Visha(food poisoning), skin diseases (Kushtha). It enhances body strength, memory, facial glow and power of digestion. It is useful in Parada Jarana procedure (increasing the therapeutic potency of mercury). The mercury extracted from cinnabar (Hingulottha Parada) possesses all the properties of Gandhaka Jaarita Parada(digestion of sulphur in mercury). It is used in the incineration procedures of gold, silver etc metals.

¹ *Rasa tantra sara & siddha pryoga Samgraha*, first part publication Krishna gopala Ayurveda bhawana (july 2003) *Rasa Prakaran* Page232

² *Charak samhita*, Vol. 1st, Sutra sthan, chapter no.9 shlok no.7 Publication choukhmbha orientaliya Varanasi, Pandit Kashinath sharma,

³ *Rasa tantra sara & siddha pryoga Samgraha*, first part publication Krishna gopala Ayurveda bhawana (july 2003) *Rasa Prakaran* Page232

⁴ *Acharya Priyarta sharama dravaya guna vighyan*, Vol.2nd Publication choukhmbha orientaliya Varanasi, Madakari prakarana. Page 16,83,362.

⁵ Nighantu Aadrsh, shri Bapalal vaidhya, Vishtindukadi varga page 61, publis. choukhambha bharti akadami, varanasi, 2001

⁶ Bhav Prakash nighantu, Acharaya Bhavmishra, Haritkyadi varga page 126 publis. choukhambha bharti akadami, varanasi, 2003

⁷ *Acharya Priyarta sharama dravaya guna vighyan*, Vol.2nd Publication choukhmbha orientaliya Varanasi, Madakari prakarana. Page 16,83,362.

⁸ *Acharya Priyarta sharama dravaya guna vighyan*, Vol.2nd Publication choukhmbha orientaliya Varanasi, Madakari prakarana. Page 16,83,362.

⁹ www.easyayurveda.com

¹⁰ D. Mani and S.S. Dhawan, Scientific Basis of Therapeutic Uses of Opium Poppy (*Papaver somniferum*) in Ayurveda, <https://www.researchgate.net/publication/262932850>

¹¹ www.easyayurveda.com

¹² Patel Asma, M.Gopi Krishna, J.Shashidhar A conceptual review on *hingula* (cinnabar- hgs), IJAPR