

CRITICAL REVIEW OF VISHADI AGADA LEPA ON SHWITRA (VITILIGO)**Dr. Gurusiddeshwar J. Kalyanimath^{*1}, Dr. Satej T. Banne², Dr. Hemil D. Patel³ Dr. Lekshmpriya S.⁴**¹HOD, Assistant Professor, Department of Agad Tantra, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.²Ph.D Scholar, Assistant Professor, Department of Dravyaguna, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.³Assistant Professor, Department of Dravyaguna, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.⁴Assistant Professor, Department of Rasashashtra & Bhaishajya Kalpana, Parul Institute of Ayurved, Parul University, Limda, Vadodara, Gujarat, India.***Corresponding Author: Dr. Gurusiddeshwar J. Kalyanimath**

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ABSTRACT

Vishadi Agada Lepa is a unique yoga mentioned in Astanga sangraha Uttarasthana and Rasa Ratna sammucchaya for Leparantha in Shwitra. For the application the drugs should be made churna and applied over the lesion. The ingredients of the yoga are Vatsanabha, Bhallataka, Chitraka, Gunja, and Nimba. Name of the yoga as Vishadi Agada Lepa because of the first ingredient being Visha i.e. Vatsanabha. All visha drugs having tremendous medicinal properties. All visha drugs having property to harm any cells or tissue but judicious utility of visha dravya may act as rejuvenative. This article deals with action of vishadi agada lepa on shwitra.

KEYWORDS: Vishadi Agada Lepa, Shwitra, Purification, Poison.**INTRODUCTION****VISHADI AGADA LEPA^[1]****1. VATSANABHA^[2]****Botanical Name:** *Aconitum ferox* Wall.**Family:** RANUNCULACEAE**Synonyms:** Amrtam, Ugravisa, Visam, Garalam, Mahoushadham, Maranam etc..**Major chemical constituents****Aconitum Ferox** – Roots contain toxic Alkaloids, Pseudoaconitine along with bishaconitine, chasmaconitine. 2-(1H)-Quinolinone and 3,4-dihydro-6-hydroxy-2-(1H)-quinolone. etc.**Aconitum Chasmanthum** – Indaconitine and A, B – chasmaconitine and chasmanthinine.**Aconitum Napellus** – Neoline, aconitine, aditerpene-15a-hydroxyneoline, aconosine, mesaconitine.**Purification (Shodhana)**

Though there is no reference about the purification of Vatsanabha among the major classics, the tuberous roots of aconite are treated in several ways before oral administration probably, Rasa Sastra might have laid emphasis on its Shodhana in ancient days. It is mentioned that impure form of visha may produce Daha,

Moha (inebriant state), Hrdgatirodhana (cardiac depressant) and death. Therefore purification is essential. There are several methods for purification, some of them are:

1. Aconite root is cut into pieces and tied in a cloth. Then it is soaked in cow's urine for three days by changing cow's urine every day. Afterwards the pieces are shade dried.
2. Purification may be done by means of boiling the aconite roots in cow's urine for 3-6 hours in Dola Yantra.

Properties

Rasa – Madhura

Guna – Laghu, Ruksha, Tiktsna, Vyavayi, Vikasi.

Virya – Usna

Vipaka – Katu

Karma – Vatakaphahara, Jvaraghna, Janghama Visahara, Madakari, Kusthaghna.

Prabhava – Rasayana.

Indication – Jvara, Jaghama visha, Kustha, Madhumeha, Sotha, Plihodhara, Agnimandya.

Part used- The Tuberous root is medicinally used in various preparations.

Dose – 1/8 ratti

Fatal Dose – 1-2 gm of root or 4-6 mg of aconitine

Fatal period – 3-6 hours.

Adverse effect of Impure Vatsanbha

If used without appropriate purification, it causes burning sensation all over the body, fainting, cardiac arrest even death.

Clinical studies

1. It is documented that unless the skin is sound a dangerous quantity may be absorbed systemically even when applied externally as liniment (Hale white 291).

2. Bhallataka^[3]

- **Botanical name:** *Semicarpus anacardium* Linn.
- **Family:** Anacardiaceae
- **Synonyms:** Aruskara, Agnimukhi, Viravrksa, Sophakrt, Agnimukha.

Major chemical constituents

- **Nut** – Bioflavanoids, A, B, C, tetrahydrobustaflavone, tetrahydromentoflavone, Nallaflavone etc.
- **Nutshell** – anacardic acid, bhilawanol, galluflavanone, jeediflavanone etc..
- **Kernel oil** – linolenic, myristic, oleic, palmitic and stearic acids.
- **Fruits** – Nicotinic acid, riboflavin, thiamine and essential aminoacid.

Purification (Shodhana)

1. Bhallataka are to be cut into pieces and preserved in brick powder for 7-12 days then wash in hot water, dried in shade.
2. Bhallataka is to be cut into pieces and make a pottali give a svedana with Narikelajala in Dola yantra for three hours.

Properties

Rasa – Katu, Tikta, Kasaya
 Guna – Laghu, Tiktsna, Snigdha.
 Virya – Ushna
 Vipaka – Madhura
 Karma – Kaphavatahara, Medya, Dipana, Bhedhana.
 Indication – Kaphavikara, Arsas, Kustha, Krimi, Gulma, Grahani, Vatavyadi.
 Part used – Fruit seeds, Seed kernel and bark.
 Dose – 125-250mg seed kernel; oil 10-20 drops.
 Fatal Dose – 5-10 gm
 Fatal period – 12-24 hours

Adverse effect of Impure Bhallataka

If used without proper shodhana Bhallataka causes blisters, glossitis diarrhea, ulcer, edema and burning sensation.

3. Chitraka^[4]

Botanical Name: *Plumbago zeylenica* Linn.
Family: Plumbaginaceae
Synonyms: Anala, Dahana, Agnika, Vahni, Vahnisanjaka, Sikhi, etc.

Major chemical constituents

Chitraneone, Plumbagin, 3-chloroplumbagin, droserone, elliptinone, isozeylinone, plumbagic acid, β - sitosterol etc.

Purification (Shodhana)

Citraka root are immersed in Lime water (churnoodaka) for one night and day and dried in shade and used it medicinal purpose (Rasa Tarangini 24/575).

Properties

Rasa – Katu
 Guna – Laghu, Ruksa, tiksna.
 Virya – Usna
 Vipaka – Katu
 Karma – Vatakaphahara, Dipana-Pacana, Grahi.
 Indication – Arsas, Grahani, Udara, Krimi, Sula, Pandu.
 Part used – Root Bark
 Dose: 1-2 gm.
 Lethal dose -above 5 gm.

4. GUNJA^[5]

Botanical Name: *Abrus precatorius* Linn.
Family: Fabaceae
Synonyms: Kakananti, Raktika etc.

Major chemical constituents

Root – Precol, abrol and two alkaloids (abrasine and precasine).

Seeda – abrine, hypaphorine, trigonelline, precatorine, abridin.

Purification (Shodhana)

Seeds are purified by boiling in Kanjika or milk for three hours in Dola yantra process (Rasa Tarangini 24/445).

Properties

Rasa – Tikta, kasaya
 Guna – Laghu, Ruksa
 Virya – Usna
 Vipaka – Katu
 Karma – Kaphavatahara, Keshya
 Root is Madhura and Snigdha
 Indication – Indralupta, Timira, Kustha, Kandu, Krimi,
 Part used – Root, leaf and seed.
 Dosage – Root and leaf powder 1-3gm, seed powder 60-170mg.
 Lethal Dose: 9 –12 gm.
 Fatal Period: 24-72hrs

Adverse effect of Impure Gunja

If used without proper shodhana Gunja causes vomiting and diarrhoea.

5. NIMBA^[6]

Botanical Name: *Azadirachta indica* A. Juss
Family: Meliaceae
Synonyms: Arista, Pichumarda, Sarvatobhadra, Hinguniryasa, Sukapriya, Subhadra.

Major chemical constituents

- **Leaves** – Azadirachtin, azadirone, nimbadiol, nimbin, nimbolide.
- **Stem bark** – Nimbin, nimbidin, sitosterol, kulinone, margosinolide, etc..
- **Root bark** – Nimbin, nimbidin
- **Fruits** – Azadirachtin, azadirachtol, azadirachtol, melianone, nimbiol, nimocin etc.
- **Seed oil** – Tocopherol, azadirone, nimbidin, salannol, nimbin, etc.
- **Flowers** – Azadiradione, margosene, linoleic acid, arachidic acid etc.

Properties

Rasa – Tikta, kasaya
 Guna – Laghu, Ruksa
 Virya – Sita
 Vipaka – Katu
 Karma – Kaphapittahara, Dipana, Grahi, krimighna, netrya.
 Indication – Jvara, Kustha, Krimi, Prameha, Vrana, Kasa, Visa roga, Gulma, Kandu.
 Part used – Root bark, stem bark, gum, flower, leaf and seeds.
 Dosage – Bark powder 2-4gm, fresh juice 10-20ml, seed oil 5-10 drops.

Table No. 1: Shodhana methods used for drugs.^[7]

Drug	Media	Principle	Method
Vatsanabha	Cow urine	Nimajjana (soaking)	Piece of aconitum is immersed in cow urine for three days and dried in shade.
Bhallataka	Isteeka churna	Kept in thick cloth with brick powder	Kept in thick cloth with brick powder for seven days and washed in hot water.
Gunja	Milk	Swedana	Swedana in Dolayantra for 6 hours.
Chitraka	Sudhajala	Prakshalana&Nimajjana	Soaking of Chitraka moola in lime water over night and dried in shade.

Preparation of Vishadi Agada**Materials used**

VatsanbhaKhanda – One part
 Bhallataka Beeja – One part
 Chitraka moola – One part
 Rakta Gunja phala – One part
 Nimbhaphala – One part
 Steel vessel
 Khalva yantra
 Dola yantra
 Weighing machine
 Saucer to filter powder
 Polythene packets to store the Churna.

Method of preparation of churna

All Shodita drugs are taken for preparation of churna, as

mentioned in Classics, and pounded in modified Ulukhuka yantra (pounding machine) individually and sieved through saucer. Vatsanabha, Gunja, Chitraka, Nimba chruna is taken in equal quantity and Bhallataka chruna is taken half part of other ingredients and packed in air tight polythene packets. Same procedure followed in preparation of Bakuchi churna.

Difficulties during preparation of drug

1. Bhallataka induced contact dermatitis – The oil of Bhallataka present in pericarp of seeds which contain Uroshiol is caused blisters over exposed area during Shodhana procedure.
2. Chitraka churna is very irritant which caused running nose and mucosal irritation (due to dust of drug element) during preparation of churna.

DISCUSSION AND CONCLUSION**Table no. 2: Pharmacological property of Vishadi Agada Lepa.**

Dravya	Varga	Visha Guna	Dravya Guna	Active Principles	Type of Poison	Kamrukata
Vatsanabha	Mahavisha	Laghu, Ruksha, Ashu, Vishada, Vyvayi, Tikshna, Vikasi, Sukhma,	Laghu, Ruksha, Tikshna, Vyavayi, Vikasi. Yogavahi (Bp)	Aconitine, Picraconitine, Aconine, Alkaloids Aconitic acid	Cardiac poison	VataKaphahara Tridhoshahara Vishahara Shophahara
Bhallataka	Upavisha	Ushna, Anirdehya rasa	Laghu, Tikshna, Snigdha	Semicarbol, Bhilawanol, Glycosides	Organic Irritant	Kaphavatahara Krimighna
Gunja	Upavisha		Laghu, Rukhsa	Abrin, Abralin, Abrine, Abric acid.	Organic Poison	Kaphavatahara Pittavardhaka Shwitraghna (RT) Varnya

Chitraka	Lekhaniya		laghu, Ruksha, Teekshna	Plumbagin, glycoside	Irritant	Vatakaphahara Shwitraghna (RT) Varnya
Nimba	Kandughna		Laghu, Ruksha	Azadirachtinol, nimbosterol	-	Kaphapittahara Kandughna Krimighna

Probable mode of action Vishadi Agada Lepa^[8]

Mode of action of this drug can be explained based on the following principle of Prabhava.

The Prabhava of Agada yoga is said "Vishaveekamad'angum' (vishajyotsnika-6/72) i.e. it relieves the effect of pathology by virtue of the unique combination of the Agada yoga dravyas. However, action of yoga is due to its Prabhava, the properties of that yoga can be understood by properties of individual ingredient also.

I. Based on Karma of drugs

The overall combination of dualism and synergetic action of yoga act like inducing Vishaja Shopha by the action of Bhallataka over the lesion this process helps in alteration of blood circulation over the site and there is vasodilation in local capillary plexuses (A.H.NI 13/21). The action of Chitraka and Vatsanabha does the Pachana of Sthanika Dosha (AH.Su.12/14.Arundutta, because in shwitra Brajaka Pitta will be inactive by vitiation of Kapha and vata).The Yogavahi guna of Visha or Vatsanabha enhances the combination effect of Gunja and Chitraka Shwitraghna and Varnya property. Nimba help by reducing Shopha by Vranaropana property.

By this pharmacodynamics of overall Synergetic action of Vishadi Agada Lepa helps in deliver the normalcy of colour of shwitra (Vitiligo) by stimulating the Brajaka pitta.

II. Based on Guna

Vishadi Agada Lepa contain total 5 ingredients

1. Vatsanabha, 2.Bhallataka, 3.Chitraka, 4.Gunja, 5.Nimbha.
- Most of the ingredients are Mahavisha and Upavisha category.
 - Visha is Agantuja hetu for Shopha.By inducing Shopha locally, activation of hypoactive Bhrajaka pitta is the Hypothesis of this study.
 - By its Katu, Tikta Rasa, Laghu Ruksha Teekshna Guna and Ushna Veerya actas Sroto Shodhaka, KaphaVataShamaka. It stimulates the Bhrajaka Pitta to perform its function and helps in the production of colour. By its Sroto Shodhakaaction it eliminates the Sanga at the level of Raktadhatwagni and acts on Bhrajaka Pitta and may promote pigmentation, invariably correcting the abnormal integrity of Sthanika Pitta.
 - Yogavahi Guna of Visha helps in enhancing the combined effects of Gunja and Chitraka- Varnya

property (RT) which leads to bring the normalcy of color.

- The ingredients of Vishadi Agada Lepa consisting of predominant Rasayana, Kapha Medohara properties and may acts as Shvitraghna.
- Nimbuka swarasa - Properties like Laghu, Teekshana, Guna, Amlaand Katu Rasa, Ushna Veerya and AmlaVipaka. By these it acts as VataKaphaharaand initiates Pitta (Bhrajaka) to produce pigmentation and helps in enhancing the penetration of potency drug faster to deeper tissue.
- A Shodhana process reduces the toxic contents of Visha Dravyas and enhances the Therapeutic action of Vishadravya.
- External application of Vishadi Agada lepa with Nimbuka swarasa and exposing to sunlight causes mild inflammatory changes over the lesion. Visha is External cause for Shopha (inflammatory changes) (C. Chi 12/6) and also Bhallataka (Uroshiol) & chitraka is irritant by nature.
- The Synergetic action of Bhallataka and chitraka may causes inflammatory reaction over a skin which leads to reversible or irreversible cell injury.
- The reversible cell injury leads to either Degeneration or subcellular alteration or intracellular accumulation of drug concentration in mast cell.
- This overall process increases the capillary permeability and blood circulation over the site, and due to other ingredient of VAL like Vatsanabha, Gunja, Nimba and chitraka leads to Antigen and Antibody reaction over lesion which may help to initiates the activation of melanocytes.
- Thus overall procedure may help in formation of new cell growth or re-pigmentation.

In vitiligo there may be some time presence of tyrosinase but not in active form hence no melanin pigment is visible, by this non-lethal pathological injurywill helps to penetrate the drug to deeper tissue and Yogavahi guna of Visha enhances theVarnya property of Gunja and Chitraka combination and helps in carry back the lostcomplexion over the lesion, by Vranaghna and Krimighna property of Nimba helps in healing the process of Shwitra.

Table No. 3: Reported Herbs that are claimed to be used in the condition of Vitiligo.^[9]

Drug	Botanical name	Active Chemical Constituent
Nimba	<i>Azadirachta indica</i>	Azadirachtinol, Nimbosterol
Bhallataka	<i>Semecarpus anacardium</i>	Sterols, Flavonoids, Glycosides
Chitraka	<i>Plumbago zylanica</i>	Plumbagin, Vanillicacid, Beta Sitosterol

The active principle of Nimba, Chitraka and Bhallataka are claimed that helps in curing vitiligo.

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