



A GLIMPSE OF DRAVYA SHODHANA AS PER AROGYA RAKSHA KALPADRUMAH: A REVIEW

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DOI: 10.7897/2277-4572.07490

Received on: 15/06/18 Revised on: 14/07/18 Accepted on: 18/07/18

ABSTRACT

Ayurveda is an Indian ancient bio-science which deals with all the aspects of healthy living. Ayurveda involves use of drugs obtained from plant, animal, metal and mineral origin. Some of these drugs may be available in toxic or non-toxic form. There are many Samskaras (pharmaceutical processes) mentioned in Ayurveda to convert the toxic substances to non-toxic forms. Shodhana (Purification therapy) is one among them. A vast amount of literary resources illustrated the knowledge of Ayurveda; Arogya Raksha kalpadrumah is one of the Kerala traditional Ayurvedic paediatric care text book, which has given separate illustration about purification of toxic substances. As utility of Ayurvedic drugs are increasing day by day, before using of drugs for therapeutic purposes there is a need of proper Shodhana (purification) to reduce the toxic effect and attain desired results. To illustrate the purification of drugs and methods explained in Arogya Raksha Kalpadrumah.

KEY WORDS: *Shodhana, Purification, Arogya Raksha Kalpadrumah, Toxic*

INTRODUCTION

Different substances like herbs, minerals, metals, etc. are abundantly used in *Ayurveda* for therapeutic purposes. Some of the substances have toxic principles in it which causes undesired ill effect in the body. In order to reduce the unwanted toxic effects and to get the desired result, different scholars of Ayurveda have explained different methods of Shodhana (purification) procedures. Shodhana is a process that is employed during the pharmaceutical processing both to detoxify and purify the raw materials (of herbal, mineral, metal or animal origin)¹. *Ayurveda* stresses upon proper *Shodhana* of drugs before therapeutic use. Proper *Shodhana* procedures will reduce the effect of toxicity, removes blemishes and enhances the efficacy of the drug.

Complete review of this article illustrates the different *Shodhana* procedures mentioned in a Kerala text *Arogya Raksha Kalpadrumah*.

About the Text: *Arogya Raksha Kalpadrumah* is a laudable literary source on speciality Ayurvedic Paediatric care of Kerala terrain. Sri Kaikkulangara Rama Warriar, one of the illustrious astute of ancient Kerala, is considered as the author of this treasured literature. This literature work contains exceptional information regarding various diseases pathogenesis and its management, with reference to paediatric age group, which is not seen in any of the other Ayurvedic literary works. This book describes in detail about 51 types of *Visarpa* and other different diseases. Author has explained about *Visha Chikitsa* and *Shodhana* of different substances in separate chapters.

Purification of metals

*Purification of Suta (Mercury)*²

Mercury is grinded with the juice of *Chitraka (Plumbago zeylanica)* for 3 hours and dried well under sun. This procedure is continued for seven times. The same procedure should be repeated with the decoction made with *Triphala (Amalaki (Emblica officinalis), Bibhitaki (Terminalia bellerica) and Haritaki (Terminalia chebula)* and juice of *Kumari (Aloe barbadensis)*.

Mercury is grinded with the decoction made with *Raja Vruksha (Buchanania latifolia Roxb.)*, decoction made with *Chitraka (Plumbago zeylanica)*, juice of *Krishna dudhura* and with the decoction of *Triphala*.

Mercury blemishes removed with grinding the decoction of *Trikatu (Black Pepper (Piper nigrum), Indian Long Pepper (Piper longum) and Ginger (Zingiber officinale))* and decoction of *Gokshura (Tribulus terrestris)* for 3 hours.

*Purification of Tamra (Copper)*³, *Naga (Lead)*⁴ and many other metals

Tamra should be grinded separately for a day with latex of *Arka (Calotropis procera)*, juice of *Vajra Lata (Cissus quadrangularis)*, *Nili (Indigofera tinctoria L.)*, *Snuhi (Euphorbia neriifolia)*, decoction of *Agni (Clerodendrum phlomidis)* and *Dwija*, juice of *Surana (Amorphophallus campanulatus)*.

*Purification of Vanga (Tin)*⁵

Vanga is placed in a mud vessel and heated till it is melted. The juice of Karpasa is poured to this and heated till the Vanga is melted. To this, the juice of Arka (*Calotropis procera*) is poured and heated again to melt the Vanga. This procedure is continued with juices of Karanja (*Pongamia pinnata*), Unmatta (*Datura metel*), Agasti (*Sesbania grandiflora*) and decoction made separately with Kalasi (*Ficus arnottiana*), Gunja Mula (*Abrus precatorius*), Bhallatakasthi (*Semecarpus anacardium*) and Hayagandhika. The juices of Vanasurana kanda, Snuhi (*Jatropha multifida*), Vajra valli (*Cissus quadrangularis*), Nirgundi (*Vitex negundo* Linn.) decoction of Nimba twak (*Azadirachta indica*), Ajamoda (*Apium graveolens*) and butter milk respectively removes the blemishes of Vanga completely.

*Purification of Krishna Seesa (Black Tin)*⁶

The melted Krishna Seesa is poured to the juice of Dwija Patra and with the juice of Nirgundi (*Vitex negundo* Linn.) separately for seven times.

*Purification of Loha (Iron)*⁷ and *Mandura (Dross iron)*⁸

Red hot iron is dipped in cow's urine to remove its blemishes. This procedure should be repeated for 21 times.

*Purification of Kanta loha (Lode stone/ Magnetite)*⁹

The Kanta loha is subjected to steaming process with the juice of Kanya (*Aloe vera* Linn.) in Dola Yantra (steaming apparatus) by which its blemishes are removed.

Purification of minerals:

*Purification of Gandhaka (Sulphur)*¹⁰

A mud vessel smeared with ghee is filled with cow's milk and the mouth of the vessel is tied with a cloth. The Gandhaka is powdered well and spread over the cloth tied over the vessel. This vessel is then covered with another vessel of same size and the edges of both of the vessels are joined together with a piece of cloth smeared with a paste of mud. The vessel containing milk is placed in a pit and the pit is closed with mud. Fire is kept around the upper vessel. Melted Gandhaka falls in the vessel containing milk by which the gandhaka is purified.

*Purification of Hingula (Cinnabar)*¹¹

The cinnabar is added with the juice of Jambira (*Citrus limonum* Burm), juice of Nimba (*Azadirachta indica*) and juice of Shringavera (*Zingiber officinale*), separately at different times and kept under sunlight for 98 minutes, then the compound is grinded with breast milk for 3 hours, it removes the perilous properties of Hingula.

*Purification of Haratala (Orpiment)*¹²

Haratala is processed in Dola Yantra with juice of Aranala (*Nelumbo nucifera*) juice of Kushmanda (*Benincasa hispida*), gingelly (*Sesamum indicum*) oil, decoction of Triphala, juice of Agastya (*Sesbania grandiflora*) and juice of Shringavera (*Zingiber officinale*) separately for 3 hours.

*Purification of Shilajatu (Asphaltum)*¹³

The Shilajatu is grinded with cow's urine, decoction of Triphala, juice of Bhringaraja (*Elcipta alba*) separately and kept in a mud vessel and dried under the sun each time.

*Purification of Gowripashana (Arsenic)*¹⁴

Gowripashana is boiled with juice of Jambira (*Citrus limonum* Burm), Curna Vari (lime water) and with Kanchika.

*Purification of Akhu Visha (Arsenic)*¹⁵

Arsenic is subjected for steaming process for 3 hours in Dola Yantra with fluids such as human's urine and cow's urine, removes its hazardous effect.

*Purification of Sankhapashana (White arsenic)*¹⁶

Sankhapashana is kept inside a Karavalli Phala (*Momordica charantia*) and smeared with mud. This is then kept in fire generated out of paddy husk for nine hours; later the medicine kept inside is collected.

*Purification of Manasila (Realgar)*¹⁷

Manasila is subjected for steaming process for 3 days with goat's urine in Dola Yantra and grinded for 7 times with goat's bile. This compound is then kept inside a mud vessel covering all around and heated in a furnace for one and a half hour.

*Purification of Abhraka (Mica)*¹⁸

Abhraka is subjected for steaming process with Aranala (*Nelumbo nucifera*) in Dola Yantra at first. This is then grinded with the juice of Tintrini Pushpa (*Tamarindus indicus*) for 3 days. It is then placed in a mud vessel covering all around and heated in a fire generated from burning cow dung cakes for 5 days. This procedure removes the blemishes.

*Purification of Tuttha (Copper sulphate)*¹⁹

Tuttha applied with ghee and heated well and dipped separately in cow's urine, juice of leaves of Tintrini (*Tamarindus indicus*), Kancika (*Strychnos nuxvomica*), Ghrita, water and in honey consecutively, removes the blemishes.

Purification of Visha (Poison)

*Purification of Vatsanabha (Aconite)*²⁰

Vatsanabha is immersed either in cow's urine or goat's urine and kept under sun light for 3 days to void off all the toxic effects.

*Purification of Arka (Calotropis procera)*²¹ Kshira

Fried Tila seeds (*Sesamum indicum*) added to the Arka (*Calotropis procera*) kshira purifies it. Any two or three among Ela (*Elettaria cardamomum*), Maricha (*Piper nigrum*), Nagahwa (*Mesua ferrea*) and Pippali (*Piper longum*) is fried and added to Arka Kshira (*Calotropis procera*) purifies it.

*Purification of Snuhi Kshira (Jatropha multifida)*²²

Snuhi kshira (*Jatropha multifida*) added with the fried Kutaja seeds (*Holarrhena antidysenterica*) and Tila (*Sesamum indicum*) seeds added with ghee remove the blemishes of Snuhi Kshira.

*Purification of Gunja Mula*²³

Gunja Mula added with the decoction made with Musta (*Cyperus rotundus*) and kept under the sun till the decoction is dried. The seed of Gunja is also purified in the same way.

*Purification of Vijaya*²⁴

Vijaya is placed in a stream of running water for 24 hours collected and dried. It is then added separately and kept for drying separately with coconut water; juice of Vira and with cow's milk removes the toxic effects of Vijaya. The impurities of Vijaya cause insanity, giddiness and even death.

*Purification of Nagaphena*²⁵

Nagaphena added with butter and melted, removes the toxic effects.

Purification of Marine drug

*Purification of Varatika (cowrie shell), Shankha (conch shell) and Shukti (Oyster shell)*²⁶

Varatika or Shankha or Shukti is boiled with cow's urine and butter milk to remove the blemishes.

Purification of Gem stones

*Purification of Pravala (Coral)*²⁷

Pravala added either with cow's milk or with the blood of rabbit is placed under the rays of moon for 3 days to remove its blemishes.

Pravala processed by above methods are again washed either with Aranala (*Nelumbo nucifera*) or with coconut water is used for medicinal purpose.

*Purification of Mouktika (Pearl)*²⁸

Mouktika is separately added with the juice of Vilva Saladu (*Aegle marmelos*) and with the juice of Tintrini Patra (*Tamarindus indicus*) and kept for 3 days to remove the blemishes.

Purification of Herbs

*Purification of Hingu (Ferula asafoetida)*²⁹

Hingu should be added with the juice of Padma leaves and grinded for one and a half hour. This is then placed under the sunlight for drying. This method will remove the blemishes of Hingu.

*Purification of Pippali (Piper longum)*³⁰

Pippali is added with Churna Toya (lime water) and kept for one and a half hour. This is then washed with Aranala (*Nelumbo nucifera*) and juice of Jambira (*Citrus limonum*) to remove the blemishes.

*Purification of Maricha (Piper nigrum)*³¹

Maricha (*Piper nigrum*) added with soured butter milk and kept for one and half hour, removes its blemishes.

*Purification of Nagara (Dried ginger)*³²

Nagara added with Churna Toya (lime water) and kept for one and a half hour. It is the washed with kanchika and dried under the sun removes the blemishes.

*Purification of Ajamoda (Apium graveolens)*³³

Ajamoda added with goat's milk and kept for 3 hours. It is then washed with water and dried under the sun.

*Purification of Chitraka (Plumbago zeylanica)*³⁴

Chitraka added with Churna Toya purifies its blemishes. Some others opine that, Chitraka to be boiled with the juice of buffalo's dung and washed in water to remove its blemishes.

*Purification of Arushkara (Anacardium occidentale)*³⁴

Arushkara added with cow's urine is kept overnight and next day morning kept under sunlight for drying. This procedure is continued for 3 days. It is then boiled with the decoction made with the bark of Aksha and dried well.

*Purification of Guggulu (Commiphora mukul)*³⁵

Guggulu subjected for swedana (steaming) in Dola Yantra with the decoction separately made with the drugs such as Nirgundi (*Vitex negundo* Linn.), Trivrut (*Operculina turpethum*), Amboda (*Cyperus rotundus*), Vasa (*Adhatoda vasica*), Arishta (*Xanthium*

strumarium) and Kulattha (*Dolichos biflorus*) removes the blemishes.

*Purification of Akuli Bija (Cassia auriculata) and Eranda (Ricinus communis)*³⁶

Akuli Bija is boiled with the decoction made with the bark of Udumbara (*Ficus glomerate*) added with the juice of cow's dung to remove the blemishes. The same procedure can be adopted for purification of Tikshna Eranda also.

*Purification of Madhu Snuhi*³⁷

Madhu Snuhi boiled either with cow's milk or juice of Vishala (*Alstonia scholaries*) or with decoction made with Vilva (*Aegle marmelos*), removes the blemishes.

*Purification of Tilwaka Kshira (Symplocos racemosa Roxb)*³⁸

Tilwaka is fried with ghee of any one or all the drugs of Madhuka (*Madhuca longifolia*), Talisa (*Abies webbiana*) and Patra and added to Tilwaka Kshira.

*Purification of Mankushta*³⁹

Mankushta boiled with the water processed with Tusha (*Terminalia bellerica*) and dried well. It is then added with soured buttermilk, is washed well and used.

*Purification of Jyotishmati (Celastrus paniculatus)*⁴⁰

Jyotishmati added with ghee and placed for 3 hours in the juice of Amboruha Kanda (rhizome of lotus (*Nelumbo nucifera*)) removes the blemishes.

*Purification of Karaskara Mula (Strychnos nuxvomica)*⁴¹

Karaskara Mula smeared with mud and heated in fire made with Jambu (*Syzygium samarangense*) wood for one and a half hour. It is then taken out from the fire, washed well and dried well to use.

*Purification of Vana Surana (Amorphophallus campanulatus)*⁴²

Vana surana added and boiled either with the juice extracted from Tintrini leaves (*Tamarindus indicus*) or with cow's dung juice, removes the blemishes.

*Purification of Jatiphala (Myristica fragrans)*⁴³

Jatiphala is added with breast milk and placed under the sun rays for an hour and taken out and dried well to remove the blemishes.

*Purification of Shringavera (Zingiber officinale)*⁴⁴

The juice of Shringavera (*Zingiber officinale*) is stored in a vessel and kept undisturbed for 3 hours. The supernatant portion of the juice is taken out and poured to a heated iron vessel and kept for cooling. This procedure will remove the unwanted qualities of Shringavera (*Zingiber officinale*) juice.

*Purification of Jambira Bija Rasa (Citrus medica)*⁴⁵

Trikatu (Black pepper (*Piper nigrum*), Indian Long pepper (*Piper longum*) and Ginger (*Zingiber officinale*)) is fried in an iron vessel and removed. To this heated vessel the juice of Jambira is added, by which it purifies the blemishes of the juice of Jambira.

*Purification of Unmatta (Datura metel)*⁴⁶ rasa

The juice of Unmatta (*Datura metel*) is added with the rhizome of Visini and placed in an open place for 3 hours by which the blemishes are removed.

Purification of Kanya (Aloe vera)^{4,7} rasa

The juice of Kanya (*Aloe vera*) is added either with loha or kanta loha for forty-eight minutes in an open space removes the toxic effect of it.

Purification of Milk

Purification of Kshira (Cow's Milk)⁴⁸

Milk boiled with equal amount of water and reduced to the quantity of milk, removes all the unwanted qualities. The fresh milk taken from the animal is always best to use. The purification of milk is not needed, when it is used externally as lepa, etc.

Purification of Aja Kshira (Goat's Milk) and Buffalo's milk⁴⁹

Goat's milk added with 4 times of water and reduced to amount of milk by boiling, removes the unwanted qualities. The buffalo's milk is also purified by the same method.

Purification of Alkali

Purification of Tankana (Borax)⁵⁰

Tankana heated in fire and kept either in cow's milk or in the decoction made with Badari Mula (*Zizipus jujube*) does the purification of Tankana.

Purification of Yavakshara⁵¹

Yavakshara mixed with the juice extracted from the flower of Dadima (*Punica granatum*) and grinded well for 3 hours. It is then dried well and used.

Purification of salt

Purification of Souvarchala lavana⁵²

Souvarchala added with the juice of Vajra Valli (*Cissus quadrangularis*) and grinded for 3 hours or one and a half hour and dried well under the sun removes the bad effect of it.

Any type of root can be purified by adding and boiling with the juice extracted from the tender leaves of Jambu (*Syzygium samarangense*). The outer cover and inner germinating bud of any poisonous seed is removed and boiled with the juice of Jambu (*Syzygium samarangense*) leaves, removes the poisonous effects.

DISCUSSION

It is a requisite to use only pure medicaments which are devoid of hazardous substances for treating diseases. The drugs which don't possess impurities can be used directly. Some drugs exist in group contain hazardous compounds. These impurities are removed by proper purification measures before using it. The chapter in this book exclusively deals with purification procedures for toxic drugs like Vatsanabha; Herbal drugs like Shringavera; mineral drugs like Haratala, poisonous drugs like Gunja, etc. They are simple procedures that can be performed and practiced. A few Shodhana procedures explained are very different to the procedures mentioned when compared to other authentic books of Rasashastra. For the purification of mineral drugs organic compounds- like juices of herbal drugs are incorporated and for a few herbal drugs use of metals for purification are used as a media.^{53, 54}

CONCLUSION

Drugs which possess unwanted impurities and toxic substances when used without proper purification procedure will lead to

harmful health effects. Many reports have proved that not all medicinal plants are safe to use. In order to reduce the harmful effect of toxic Phyto- constituents, *Shodhana* is a procedure which converts toxic substances to non-toxic one.

Therapeutic effectiveness of the Ayurvedic drugs have been established and well documented by great sages of Ayurveda. Lot of changes have occurred in pharmaceutical fields which have brought a lot of changes in preparation of medicines for therapeutic purposes. Adulteration, improper purification, etc. factors have led to a bad impact on the Ayurvedic drugs. It is time to cross refer the classical references of purification of drugs to get better and safer drugs for therapeutic purposes.

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How to cite this article:

Acha Vidhya Dharini *et al.* A glimpse of dravya shodhana as per arogya raksha kalpadrumah: A review. J Pharm Sci Innov. 2018;7(4):104-109.
<http://dx.doi.org/10.7897/2277-4572.07490>

Source of support: Nil, Conflict of interest: None Declared

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