

A review on kukkutanda twak bhasma

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Abstract

Kukkutanda (Hen's egg shell) is a commonly used food material. Kukkutandatwak (egg shell of hen) has been used for therapeutic purposes in the form of bhasma known as Kukkutanda Twak Bhasma. Kukkutanda is a jangamadraya. It is included under Sudha Varga as it contains Calcium compound. In initial texts Shukla varga was the name used to include Calcium containing drugs like Sudha, Kurmaprishta, Varatika, etc. Later texts especially the books of 19th and 20th century have used the term Sudha Varga to include calcium containing drugs. Kukkutanda Twak is an excellent source of organic form of Calcium and has more bioavailability than that of inorganic form. In this article, details regarding its composition, usage, Shodhana (purification), Marana (Incineration), dose, anupana (adjuvant) and indications are discussed.

Keywords: Kukkutandatwak; Bhasma; Sudhavarga; Calcium compound

1. Introduction

Rasashastra is the science which deals with the study of metals, minerals, Sudhavarga and Visha (poison) dravyas, etc. It describes the identification, purification, incineration and the properties of these dravyas along with their medicinal preparations. In Sudhavarga, dravyas having Calcium as the main constituent have been described.^[1] As per Sudhavarga is concerned, in ancient texts like Rasarnava and Rasaratnakara, the term Shukla varga is found to be used for it. In Shukla varga,^[2] the drugs like Sudha (Lime), Shankha (Conch Shell), Shukti (Pearl Oyster) and Varatika (Cowry) are included. The texts like Rasamruta and Ayurveda SaaraSangraha may be due to the influence of modern chemistry have developed a separate view of Sudhavarga as a group of calcium containing group. Use of KukkutandaTwak (KT) is seen since Samhitakala for the external application on the body in churna form. Use of KT in its bhasma form is found to have started in Rasashastrakala (period of Indian alchemy). For the preparation of bhasma, marana (incineration) of the shodhita (purified) metal or mineral has to be done. Marana is the process in which shodhita metal or mineral is triturated with specific plant juice and then whole mixture is subjected to agnisamskara, which yields bhasma i.e., very fine incinerated ash.

2. Classification

In the different drugs of Sudhavarga, calcium is found to be present in different forms of its salts e.g. Calcium silicate in Badarashma, Calcium sulphate in Godanti, Calcium phosphate in Ajasthi, Calcium hydroxide in Sudha, Calcium carbonate in KukkutandaTwak, etc. In majority of the drugs, Calcium is present in the form of Calcium carbonate e.g. in Shankha, Shukti, Kapardika, Pravala, Mukta, etc. Calcium carbonate supplements have the highest percentage of elemental calcium among the calcium salts.^[3] Composition Kukkutanda Twak contains 95% Calcium carbonate and 5% Calcium phosphate, Magnesium carbonate, proteins, etc.^[4] Use of Calcium in the form of Calcium salts may be useful to prevent or to correct Calcium deficiencies, to treat osteoporosis, as an antacid, as a Phosphate binder or for acute treatment of Tetani, Lead colic, etc.^[5]

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Usage Kukkutandatwak Bhasma (KTB) is found to be very effective in the conditions like Shwetapradara (Leucorrhoea), Vatavikara (diseases because of vitiation of vata), Prameha (Diabetes), etc. [6] It is useful to improve bone density, since it is a good source of calcium hence used in arthritis, osteoporosis, etc. There are no significant side effects reported with the regular use of eggshell calcium (KTB). Therefore, it can be considered that it is safe for long-term and regular use. [7] But the scientific validation of KTB found is inadequate. Effective use of KTB also helps to adequate utilization of the egg shells which are otherwise disposed as a waste.

2.1. Shodhana [8] (Process of Purification)

Four methods of KT Shodhana could be found which are mentioned below. Nimajjana^[9] is the common method of shodhana but the media used and time of nimajjana is different according to the different acharyas.

2.2. Marana (Process of Incineration) [10]

For Marana of KT, only two bhavanadravyas are mentioned namely Changeriswarasa and Ghridakumariswarasa. [11]

The number of puta (quantum of heat) mentioned is four as the drug KT is mrududravaya (soft in nature).

Dose: 1-4 ratti (125-500mg) Anupana (Adjuvant): Navaneeta (Butter), Ksheera (Milk), Sita (Sugar candy), Dadimaswarasa (Juice of pomegranate fruit), Amalakiswarasa (Juice of amla), Chyavanaprashaavaleha, Madhu (Honey) Indications: [12]Hridroga (cardiac disorder), mastishkaroga (disorders of brain), bahumutrata, prameha (diabetes), soma roga, raktapitta (bleeding disorder), swapnadosha, swetapradara (leucorrhoea), raktapradara, sukravikara, sukranirbalata, napumsakatva.

3. Discussion

Rasashastra has given an immense contribution to the field of Ayurvedic therapeutics. There are a number of drugs mentioned in rasashastra that have both therapeutic and nutritional values. Kukkutanda Twak is one such drug that is popularly used in the form of bhasma. Kukkutanda Twak was included under shuklavarga as the prepared bhasma of this group drugs will be in white colour. Later it was named as sudhavarga, as the drugs included in this are rich in calcium component. In KT the calcium is in the form of calcium carbonate which has the highest percentage of elemental calcium among the calcium salts. Nimajjana (Soaking) is the procedure which is followed for the shodhana of KT, as the drug is not toxic in nature and the process of nimajjana will remove the physical impurities and also makes the drug soft; that in turn will help in the process of incineration. But different dravadravayas are said like ushnodhaka, lavanodaka, saindhava- navasadarajala, etc. for the process of shodhana. This process will remove the external impurities and also the inner membranous layer. Shodhitha KT is converted into bhasma form by marana process. Changeri or Gritakumariswarasa are used for bhavana. The components of these bhavana drugs will be imbibed to the Kukkutandatwak that will enhance the therapeutic property Kukkutanda twak bhasma. The number of putas mentioned is two to five as the KT is not heavy, by giving only two to four puta it turns into the form of bhasma.

4. Conclusion

Rasashastra is a science that deals with Ayurveda pharmaceuticals and the use of mineral, metallic, animal origin drugs, etc. are used in various formulations. Kukkutanda Twak bhasma is one such drug of animal origin that is used as a single bhasma with a broad spectrum of indications. The bhasma is said to be useful in a varied spectra of diseases like hridroga, raktapitta, etc. As the drug is easily available and the processing is very simple it can be prepared easily. The bhasma can be tried in various diseases with suitable adjuvant and researched upon.

Compliance with ethical standards

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