



SUDHASHATKA YOGA: A REVIEW

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ABSTRACT

Ayurveda Pharmaceutics deals with preparation of formulations with drugs comprising of herbs, metals, minerals, etc. The origin of the drugs could be herbs, mineral, marine or animal products. These drugs will be in crude form and hence before application in formulations, they are subjected to various processes. The formulations are a combination of these dravyas alone or in combination viz., herbal, herbo-mineral, herbo-marine, marine-animal products, etc. One such formulation is Sudhashatka yoga where it is a combination of six ingredients namely Pravala, Shukti, Shankha, Kaparda, kurmaprishta and godanti. It is a formulation comprising of mineral drug, marine drug and animal origin drug. As these drugs are a composition of calcium, this compound formulation is indicated in calcium deficiency in children.

Keywords: Calcium, shankha, pravala, shukti, shankha, ayurveda pharmaceutics

INTRODUCTION

Formulations in Ayurveda pharmaceutics are a combination of herbo-mineral drugs, mineral-metallic compounds, etc. The combination of ingredients also is varied; it could be of animal origin drugs, mineral origin, metal origin, etc. One such formulation is sudhashatka yoga that is a

combination of sudhavargeeya drugs namely pravala, shukti, shankha, kaparda, godanti and kurmaprishta which is an animal product. All the ingredients taken are in the form of bhasma (calcified ash). The marine dravyas are subjected to shodhana (purification), marana (incineration) by processing with

herbal juices or decoctions and subjecting to specified amount of graded heat by which it turns into the form of ash. The bhasma of all the ingredients are mixed homogenously and used as indicated with specified adjuvant (Table 1, 2).

Method of preparation: All the bhasma are taken in a khalva yantra and bhavana

(trituration) is given with nimbu rasa (*Citrus limon*) for three times and pills of a ratti size are prepared.

Dose: 2- 8 ratti (250mg to 1 g) with milk as adjuvant.

Indications: In deficiency of calcium, bala shosha (emaciation).

Table 1: Ingredients of the formulation [1]

Sl. No.	Ingredients	Proportion
1	Pravala bhasma (calyx of coral)	1 part
2	Shukti bhasma (calyx of oyster shell)	2 parts
3	Shankha bhasma (calyx of conch shell)	3 parts
4	Kaparda bhasma (calyx of cowries)	4 parts
5	Kurmaprishta bhasma (calyx of back of tortoise)	5 parts
6	Godanti bhasma (calyx of gypsum)	6 parts

Table 2: Properties of the ingredients

S. No.	Rasa dravya	Rasa	Guna	Veerya	Doshaprabhava	Karma
1	Pravala (calyx of Coral)	Kashaya (astringent), Madhura (sweet), Amla (sour)	Laghu, snigdha (unctuous), sheeta (cold)	Sheeta (Cold)	Pittajit, Tridoshaghna (alleviates all the doshas)	Vrishya (aphrodisiac), Balya (strengthens body), Grahadosahara (Psychosis), Chakshushya (beneficial for eyes), useful in vishajara roga (toxic symptoms)
2	Shukti bhasma (calyx of oyster shell)	Madhura (sweet)	Susheeta (cold), Laghu (light)	Sheeta (Cold)	Kaphapittahara (alleviates kapha & pitta dosha)	Brimhana (nourishing), vrishya (aphrodisiac), ayushya (increases longevity), asthidantavivardhana (strengthens bones & teeth), pushtikara (nourishing), deepana (appetiser), bedana, kantiprada (increases complexion), balya (strengthening), chakshushya (increases vision), veeryaprada
3	Shankha bhasma (calyx of conch shell)	Kshariya (alkaline)		Sheeta (Cold)		Balavardhaka (increases strength), grahi (binding)
4	Kaparda bhasma (calyx of cowries)	Katu (pungent), Tikta (bitter)	Guru (heavy), Ushna (Cold)	Ushna (Hot)	Kaphavatahara (alleviates kapha & vata dosha)	Deepana (appetizer), Vrishya (aphrodisiac), Netrya (increases vision), rasayana (rejuvenative), shukrakara, doshahari (alleviates the disorders),
5	Godanti bhasma (calyx of gypsum)	-	Sheeta	Sheeta	Pittadosahara (alleviates pitta dosha)	Balya (strengthening), deepana (appetizer), jwarahara (anti-pyretic), shulahara (analgesic)

DISCUSSION

The ingredients are all compounds of calcium and four of these are marine drugs namely, shankha, shukti, kaparda, pravala, one is a mineral drug namely Godanti and another is of animal origin i.e., kurmaprishta (calyx of back of tortoise). In a study carried out previously it is said that Calcium is present in the form of oxide (CaO); in Shankha it is 53.964 %w/w, in Shukti 54.844%w/w, in Varatika 54.984%w/w. The comparative quantity of calcium was more in the case of Varatika bhasma and less in Shankha bhasma [2].

An analytical study on pravala highlights that the elements present in Pravalabhasma are Ca(38.69%), O(40.66), C(12.70%), Mg(4.61%), Si(0.88), S(0.45%), Fe(0.37%), Na(0.36%), Al (0.36%), Sr(0.27%), P(0.18%), Cl(0.17%), K(0.15%), Cu(0.05%), Ti(0.04%), Zn(0.03%), Cr, Zr, Ni, Mn, As, Mo are in traces. The XRF analysis of Pravala showed, calcium as the major element, magnesium, silicon, phosphorous, manganese and iron are the minor elements; aluminum, sulfur, potassium, strontium are the trace elements [3].

In an analytical study carried out on *Mukta Shukti Bhasma*, it is said that calcium

is present in the form of both calcite and calcium oxide hydrate form [4].

A study where the analysis of shankha carried by XRD has revealed that the pattern of both raw and finished conch when simulated with standards, clearly indicated that raw conch is aragonite in nature, while after incineration this aragonite structure got rearranged to calcite form. A direct comparison of the XRD patterns of the conch samples with the simulated patterns shows that the raw conch is calcium carbonate only in the aragonite form without any calcite content. On the other hand, the three batches of the incinerated conch reveal the presence of only calcite form of calcium carbonate without any aragonite content. Calcium oxide has not been detected in both, the raw and the incinerated conch samples [5].

In an article it is mentioned by XRD analysis of kaparda bhasma that the highest peak at 2000 in two samples of kaparda bhasma, indicated the majority presence of Calcium oxide. However there is some signature of presence of Calcium carbonate and also showed the presence of Magnesium and Potassium oxide in some extent [6].

An article on analysis of shells of dead tortoise that were donated by commercial animal traders and private

persons when they died from various causes showed presence of various elements namely calcium, phosphorous, iron, copper and zinc. Calcium was present from 52.2 ± 10.5 in hatchlings to 244 ± 21 g/Kg in adults [7].

Godantibhasma contains 42.30 % Calcium (Ca) as calcium oxide (CaO) when analysed by gravimetric method [8].

In another study it is said that Calcium as CaO% w/w in praval is 72.067%, in shankha 63.941%, in shukti 82.891%, in varatika 67.484%, in godanti 45.990. The comparative quantity of calcium was more in case of shukti bhasma (82.891%) and less in godanti bhasma (45.990%) [9].

CONCLUSION

The formulation is indicated in deficiency of calcium and all the ingredients are a rich source of calcium. Calcium is said to be present in the form of calcium oxide in different proportions in all the ingredients used in the formulation. Shankha, shukti, varatika, godanti, pravala are all easily available ingredients. The other ingredient namely kurmaprishta can be omitted from the formulation for ethical reasons to protect the fauna of the planet. The formulation can be studied as a supplement for calcium deficiency diseases.

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