

STUDY THE USAGE OF *KAPHAKETU RASA* AS CALCIUM SUPPLEMENT

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Calcium is necessary for bone growth, muscle contraction, nerve impulse conduction, and enzyme function. Calcium deficiency can lead to osteoporosis, stunted growth, and muscle cramps. Though there are synthetic calcium supplements available, they have the disadvantage of causing side effects like gastric irritation and kidney damage. In Ayurveda there is specialized group, *Sudha varga* which contain calcium rich materials. *Shankha bashma* is an important calcium contain material described under *Sudha varga*. *Shankha Bhasma* is employed in *Kaphaketu Rasa*, a conventional Ayurvedic medicine that is used in *Kaphaja roga*. The objective of this study was analysing and determining calcium content of it. Preparation was according to Ayurveda Pharmacopeia by using *Shuddha tankana*, *Pippili churna*, *Shankha bhashma*, *Shuddha vachchanavi* and *Ardraka swarasa* in size of one *Madata* (125 mg) and analysed organoleptic, physicochemical, pharmaceutical, and chemical parameters like HPTLC fingerprinting and calcium determination by acid-base titration. Phytochemical analysis revealed that the presence of flavonoids, alkaloids, saponins, tannins, phenols. HPTLC fingerprint showed seven different peaks. Calcium content was 13.76% as calcium carbonate. Pharmaceutical parameters like friability (0.74%), disintegration (15 min), weight variation(passed) and hardness (52 N) were within the standard limit. Physiochemical parameters like total ash value (3.8%), water-soluble ash value (2.4%), acid-insoluble ash value (1.1%), moisture content (3.8%) were within the standard range. According to results as one tablet contains 1/7th of calcium from the total weight it's not a best option for the calcium deficiencies. But lungs need calcium for secretion of mucous, bronchoconstriction, degranulation of various immune cells and mitochondrial functions. Therefore, *Kaphaketu rasa* which contains calcium is effective in *Kaphaja* diseases rather than for calcium deficiencies.

Keywords: Ayurveda, *Kaphaketu rasa*, *Sudha varga*, *Shankha bhashma*, Calcium supplement