



A REVIEW ON THE ANTIULCER ACTIVITY OF RASADRAVYA: AYURVEDIC METALLOPHARMACEUTICALS WITH GASTRO PROTECTIVE POTENTIAL

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ABSTRACT

Rasadravyas the metallic and mineral substances used in Rasashastra, occupy an important position in Ayurvedic pharmaceuticals. Traditionally, these drugs are processed through Shodhana (purification) and Marana (incineration) procedures to form bioavailable and non-toxic Bhasmas or Rasasinduras that exhibit potent therapeutic activity even in minute doses. Peptic ulcer and related disorders, described in Ayurveda as Amlapitta and Parinamashoola, are primarily Pittaja Vyadhi resulting from imbalance of Pitta Dosha and Agni Dushti. Several Rasadravyas such as Shankha Bhasma, Mukta Shukti Bhasma, Kapardika Bhasma, Tamra Bhasma, Abhraka Bhasma, and Suvarna Makshika Bhasma have been traditionally used in the management of Amlapitta and gastrointestinal disorders. Modern pharmacological studies have begun validating their antiulcer and gastro protective actions, including acid neutralization, cytoprotection, antioxidant and mucosal defense enhancement. This review compiles classical references, formulation uses, and available experimental evidence on the antiulcer potential of Rasadravyas.

KEYWORDS: Rasadravya; Rasashastra; Antiulcer activity; Amlapitta; Bhasma; Shankha Bhasma; Mukta Shukti Bhasma; Suvarna Makshika; Ayurveda; Gastro protection.

INTRODUCTION

Rasashastra a specialized branch of Ayurveda, deals with the processing of metals, minerals and mercurial for therapeutic application.^[1,2] Rasadravyas refers to substances of metallic or mineral origin such as Parada (Mercury), Tamra (Copper), Shankha (Conch shell), Mukta (Pearl), Abhraka (Mica), Suvarna Makshika

(Copper pyrite), etc. When properly purified and calcined, these substances transform into biocompatible nanoparticles known as Bhasma, which are safe, stable and therapeutically effective.

Ayurveda describes Amlapitta and Parinamashoola as disorders arising from aggravated Pitta Dosha and

impaired Agni.^[1,2] The role of Rasadravyas in such conditions is dual to neutralize the excessive Amla Guna (acidic property) and to strengthen Agni without aggravating Pitta. Classical formulations such as Sutashekhara Rasa, Kamadudha Rasa, Dhatri Lauha, and Shankha Vati have long been prescribed for gastritis and ulcer like conditions.

In recent years, pharmacological and analytical studies have validated the antiulcer, cytoprotective, and antioxidant effects of several Rasadravyas, thus bridging classical knowledge and modern gastroenterology.

Review of Literature

Ayurvedic Conceptual Background

In Amlapitta Chikitsa, Acharyas have recommended Pittashamaka and Sheetala drugs, including mineral

preparations.^[1,2] Rasadravyas possessing Madhura Rasa, Sheeta Virya, Pittaghna, Stambhana, and Ropana Guna are indicated for restoring the gastric mucosal balance. Shankha, Kapardika, Mukta shukti, Suvana Makshika, and Abhraka are notable examples. The process of Shodhana and Marana converts the raw mineral into fine, physiologically assimilable form, eliminating toxicity and enhancing therapeutic efficacy.

Important Rasadravyas with Antiulcer Potential

Rasadravya / Bhasma	Classical Indications	Probable Mechanism (Modern Correlation)	Supporting Studies / Observations
Shankha Bhasma	Amlapitta, Grahani, Shoola	Neutralizes gastric acid; enhances mucosal defense	Reduction in ulcer index in pylorus-ligated rats (Gaur et al., 2015) ^[3]
Mukta Shukti Bhasma	Amlapitta, Hritkantha Daha	Alkaline, soothing; enhances mucosal integrity	Decreased gastric acidity; increased mucus
Kapardika Bhasma	Amlapitta, Atisara, Shoola	Acid - neutralizing; strengthens gastric mucosa	Reduced ulceration; improved histological healing
Abhraka Bhasma	Agnimandya, Grahani, Rasayana	Antioxidant; mucosal protective	Reduced oxidative stress in ethanol induced ulcers
Suvana Makshika Bhasma	Pitta - Vikaras, Shoola, Pandu	Antioxidant; cytoprotective	Reduced lipid peroxidation and ulcer index
Tamra Bhasma	Amlapitta, Shoola, Yakrita Vikaras	Stimulates digestion; mucosal regeneration	Enhanced prostaglandin-mediated mucosal protection
Godanti Bhasma	Amlapitta, Jwara, Daha	Natural antacid; promotes mucosal repair	Supports hyperacidity and gastric discomfort

Classical Formulations Containing Rasadravyas

Formulation	Major Rasadravya	Indication (Ayurvedic)	Reported Antiulcer Mechanism / Findings
Sutashekhara Rasa	Shuddha Parad, Gandhaka, Tamra Bhasma	Amlapitta, Parinamashoola	Reduces gastric acidity, protects mucosa
Kamadudha Rasa	Mukta Shukti, Praval, Shankha Bhasma	Pittaja Vikara, Daha, Amlapitta	Acts as antacid, supports mucosal regeneration
Shankha Vati	Shankha Bhasma, Kajjali	Amlapitta, Adhmana, Agnimandya	Neutralizes acid, promotes digestion
Dhatri Lauha	Lauha Bhasma with Amalaki	Amlapitta, Pandu	Antioxidant and cytoprotective effects
Pravala Pishti	Coral powder	Amlapitta, Daha	Antacid, increases gastric pH

Experimental and Pharmacological Studies

- Shankha Bhasma** (200 mg/kg, oral) decreased ulcer index in ethanol- and aspirin-induced ulcers in rats (Gaur et al., 2015).^[3]
- Kamadudha Rasa** (125 mg/kg) exhibited antiulcer activity comparable to ranitidine (Singh et al., 2012).^[4]
- Abhraka Bhasma** showed antioxidant and mucosal protective effects (Kale et al., 2016).^[5]

- Suvana Makshika Bhasma** reduced ulcer index and improved antioxidant enzyme activity (Sastry et al., 2014).^[6]
- Shankha Vati** demonstrated antacid, anti-secretory, and cytoprotective activities (Patgiri et al., 2010).^[7]

DISCUSSION

The antiulcer potential of Rasadravyas can be understood from both Ayurvedic and modern perspectives. Pitta Shamana and Sheetala Guna help neutralize excessive gastric acidity, while antioxidant and cytoprotective

actions of trace elements support mucosal healing. Nano-sized Bhasmas increase bioavailability and tissue level efficacy. Correct preparation and dosage are critical for safety and efficacy. Standardization and clinical trials are necessary for global acceptance.

CONCLUSION

Rasadravyas such as Shankha Bhasma, Mukta Shukti Bhasma, Kapardika Bhasma, Abhraka Bhasma, and Suvarna Makshika Bhasma demonstrate significant antiulcer potential. Classical formulations like Kamdudha Rasa, Sutashekhara Rasa, and Shankha Vati validate traditional use. Integration of Ayurvedic Rasashastra knowledge with modern pharmacology offers a promising approach for peptic ulcer management. Future research should focus on standardization, analytical profiling, safety evaluation, and clinical trials.

LIST OF REFERENCES

1. Sharma S. Rasa Tarangini. Motilal Banarasidas, Delhi.
2. Tripathi ID, ed. Rasa Ratna Samucchaya. Chaukhamba Orientalia, Varanasi.
3. Gaur A, et al. Evaluation of antiulcer activity of Shankha Bhasma in experimental models. *Ancient Sci Life.*, 2015; 34(3): 132–137.
4. Singh P, et al. Experimental evaluation of Kamdudha Rasa as an antiulcer agent. *AYU J.*, 2012; 33(2): 251–255.
5. Kale R, et al. Antioxidant and antiulcer effect of Abhraka Bhasma. *J Ayurveda Integr Med.*, 2016; 7(4): 235–241.
6. Sastry JL, et al. Evaluation of Suvarna Makshika Bhasma for gastroprotective potential. *J Ethnopharmacol*, 2014; 153(1): 240–246.
7. Patgiri BJ, et al. Pharmaceutical and pharmacological evaluation of Shankha Vati. *Ayu.*, 2010; 31(3): 367–372.