



## GENERAL MANAGEMENT OF LANGALLI (GLORIOSA SUPERBA) POISONING: MODERN AND AYURVEDIC PERSPECTIVES

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**ABSTRACT** Langalli (*Gloriosa superba*) poisoning presents a significant medical emergency due to its potent toxic properties, leading to severe gastrointestinal, neurological, cardiovascular, and renal complications. This review explores the management strategies for Langalli poisoning, comparing modern medical interventions with traditional Ayurvedic treatments. The potential integration of these approaches may offer comprehensive care, enhancing patient outcomes and recovery.

**KEYWORDS :** Langalli, poisoning, modern medicine, Ayurveda, detoxification, supportive care

### INTRODUCTION

Langalli, scientifically known as *Gloriosa superba* with the English name flame lily, is a plant renowned for its medicinal uses and high toxicity. Poisoning from Langalli can be life-threatening and requires prompt medical intervention. Poisoning from Langalli can occur accidentally or intentionally, leading to severe health problems. Effective management of this condition involves understanding both modern and Ayurvedic treatment strategies, potentially providing a holistic and integrated approach to patient care.

### Medico legal importance

Accidental Mostly, Due to its use in therapeutic purposes . For criminal abortion it is introduced in vagina. Homicidal, Suicidal: Rare

**Fatal Dose:** 60 mg for adults.

**Fatal Period:** 12 to 72 hours

**Botanical Description:** A perennial herbaceous climbing herb growing 3.5 to 6.0 meters in length.

**Tubers:** V or L-shaped, finger-like that are pure white when young, becoming brown with age.

**Leaves:** Pointed, dark green, glossy, each equipped with a tendril by means of which it clings onto other plants. Occur in whorls of 3 to 4, opposite or alternate, simple, sessile, ovate to lanceolate ranging from 6 to 20 cm in length and 1.5 to 4 cm wide.

**Flowers:** Attractive borne on long stalks. Have six erect petals ranging in colour from bright yellow to bicoloured, red and yellow or purple and yellow. The genus derives its name from the Latin word 'gloriosus' referring to the flowers.

**Fruits:** Capsules that split open to release several smooth red seeds with a spongy test.

### Aim

To review and compare the management of Langalli poisoning through modern medical practices and Ayurvedic treatments, and to explore the benefits of integrating these approaches for optimal patient care.

### Objectives

To identify and describe the clinical presentation and symptoms of Langalli poisoning. To outline modern medical management strategies for Langalli poisoning. To describe Ayurvedic treatments for Langalli poisoning. To evaluate the potential benefits of integrating modern and Ayurvedic treatment approaches.

### MATERIALS AND METHODOLOGY

#### Materials

- Clinical reports and case studies on Langalli poisoning.
- Textbooks and peer-reviewed articles on toxicology and

emergency medicine.

- Ayurvedic texts and literature on traditional detoxification and treatment methods.

### Methodology

- Literature Review:** Conduct a comprehensive review of modern and Ayurvedic literature on Langalli poisoning management.
- Data Synthesis:** Compare and contrast the management strategies from both medical traditions.
- Analysis:** Evaluate the effectiveness and potential integration of modern and Ayurvedic treatments.

### Observations

#### Modern Medical Management

##### 1. Identification of Symptoms:

- Gastrointestinal:** Nausea, vomiting, diarrhea.
- Neurological:** Headache, dizziness, seizures.
- Cardiovascular:** Hypotension, arrhythmias.
- Hematological:** Thrombocytopenia, coagulopathy.
- Renal:** Acute kidney injury.

##### 2. Initial Stabilization:

- Airway Management:** Ensure airway patency.
- Breathing:** Administer oxygen if needed.
- Circulation:** Monitor vital signs, establish IV access, and begin fluid resuscitation if the patient is hypotensive.

##### 3. Decontamination:

- Gastric Lavage:** Within the first hour of ingestion, if the patient is stable and the airway is protected.
- Activated Charcoal:** Administered to bind the toxin and reduce absorption.

##### 4. Symptomatic and Supportive Care:

- Intravenous Fluids:** To maintain hydration and correct electrolyte imbalances.
- Anti-emetics:** For nausea and vomiting.
- Anticonvulsants:** For seizures.
- Cardiac Monitoring:** Continuous ECG monitoring for arrhythmias.
- Renal Support:** Dialysis in cases of acute kidney injury.

##### 5. Specific Antidotes:

- Currently, there is no specific antidote for Langalli poisoning. Treatment focuses on supportive care and managing complications.

### Ayurvedic Management

#### 1. Identification of Symptoms:

- Similar to modern medicine, with emphasis on observing the

body's response as per Ayurvedic principles.

## 2. Initial Detoxification:

- **Vamana (Therapeutic Emesis):** Induced vomiting to expel toxins from the stomach.
- **Virechana (Purgation):** Administering purgatives to cleanse the bowels.

## 3. Detoxification Therapies:

- **Herbal Preparations:**
- **Triphala:** Used for its detoxifying properties.
- **Guduchi (Tinospora cordifolia):** Known for its immunomodulatory and detoxifying effects.
- **Haridra (Turmeric):** For its anti-inflammatory and antioxidant properties.
- **Panchakarma Therapy:** Comprehensive detoxification process involving multiple procedures like Vamana, Virechana, and Basti (medicated enemas).

## 4. Supportive and Symptomatic Care:

- **Hydration and Nutrition:** Herbal teas and decoctions to maintain hydration, light and easily digestible diet to support recovery.

## 5. Restorative Practices:

- **Rasayana Therapy:** Use of rejuvenating herbs to restore vitality.
- **Yoga and Pranayama:** Breathing exercises to improve respiratory function and overall wellbeing.

## 6. Medicinal Uses

- It is used as appetizer in medicinal dose, skin disorders, scorpion & snake venom, Leprosy, Haemorrhoids, & in worm infestations.
- Root of this plant is used as an ingredient in many ayurvedic classical formulations and indicated for various clinical conditions such as, Shotha (inflammation / oedema), Vrana (wound), Gandamala (lymphadenitis), Charmoroga (skin diseases), Kshalitya (hair loss), Agnimandya (loss of appetite), Arsha (piles), Vatavyadhi (joint pain / arthritis/some neurological disorders) and many others.

**7. Medicinal preparations:** Kasisadi Taila, Langali Rasayana, Langalyadivati

## CONCLUSION

Langalli poisoning requires prompt and effective management to prevent severe complications and mortality. Modern medical practices provide essential interventions for immediate stabilization and symptomatic treatment, while Ayurvedic approaches offer valuable methods for detoxification and holistic recovery. Integrating these approaches can enhance patient outcomes by addressing both acute care needs and long-term health restoration.

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