

Case Report

Common Milk Hedge (*Euphorbia neriifolia*) Juice Ingestion: A Clinical Case Report

Sadananda Naik B

ABSTRACT

Common milk hedge (*Euphorbia neriifolia*) is grown as a hedge plant in various parts of India. The latex of this plant, which is in the form of a white milky juice, has corrosive effect on contact with skin and mucous membrane. Cases of deliberate ingestion of this juice have rarely been reported in literature. One such rare case of ingestion of the latex with attendant clinical manifestations has been presented here.

Key Words: Common milk hedge, *Euphorbia neriifolia*, Latex, Snuhi

Introduction

Common milk hedge (*Euphorbia neriifolia*) is an erect, shrubby, branched, fleshy, cactus-like plant growing up to 2–4 meters in height (**Fig 1**). It belongs to family Euphorbiaceae. The leaves of this plant are fleshy and oblong, while the stem is spiny. It is commonly grown in gardens as a hedge plant. When the stem or leaves is cut, a milky juice (latex) oozes out, which is known to have a corrosive effect on skin and mucosa. The plant has been used for various ailments in Ayurvedic medicine, and is popularly known as Snuhi.¹ Toxicity can result from ingestion of the milky juice of this plant.² A case report of ingestion of this plant juice is being presented here.

The Case: A 20-year-old girl was brought to the emergency room with a history of deliberate ingestion of the milky juice of the common milk hedge (*Euphorbia*

neriifolia). She had prepared about 100 mL of milky juice of the plant mixed with water, and drank it following a quarrel with her mother. On admission, she complained of burning epigastric pain and vomited twice. There was no history of diarrhoea. On examination, her general physical condition was essentially normal, except for mild epigastric tenderness, and her vital parameters were also normal.

Routine laboratory investigations revealed the following: Hb 13 g%; total leucocyte count 8700/cu mm; differential count – N65, L30, E5; RBS 123 mg%; blood urea 34 mg%. Serum electrolytes, renal parameters, and liver function tests were normal. Urine examination did not disclose abnormal findings, while stool examination was negative for occult blood.

The patient was managed with IV fluids, parenteral ranitidine, antacids, and parenteral ondansetron for 24 hours. She was discharged after two days, and was lost to follow up.

Discussion

Common milk hedge (*Euphorbia neriifolia*) or snuhi is a hedge plant grown widely in India and other Asian countries. Leaves, roots and the latex of the plant are used in the treatment of various ailments, including asthma, skin diseases, gastro-intestinal diseases, haemorrhoids, etc.

The milky juice is acrid, and is used as a purgative, expectorant and rubefacient. It has also been used to enhance wound healing.³ Both the alcoholic and aqueous



Fig. 1 *Euphorbia neriifolia*

extract of the juice obtained from a fresh stem revealed significant local anaesthetic activity on dermal wheal in guinea pig, and foot-withdrawal reflex in frog.⁴

The latex is a powerful contact poison, but it is quite weak as a stomach poison. Chemical constituents include triterpenoids, euphol, euphorbol hexacosonate, taraxerol, etc.¹ It produces inflammation at the site of contact, and can cause severe irritation of the eyes, and sometimes even blindness. Ingestion can lead to irritation of GI mucosa, with resultant nausea, vomiting, and diarrhoea. Rarely, convulsions, coma or even death is possible.⁵

Toxicological studies have shown various pathological changes in the liver, heart and kidney.² In Ayurvedic practice, the extract is diluted and used for “shodhana”, a purification method before starting medications.⁵

The patient in this case consumed a fairly large amount of the milky juice, but did not develop any corrosive effect except for mild gastric irritation. No systemic features of toxicity were observed. The relatively mild manifestations were probably due to dilution of the latex with water.

Acknowledgement

The author would like to acknowledge the help of Dr Hemani, Dr Smitha, and Dr Sujnan, resident physicians of Alvas Ayurvedic Medical College, Moodabidri, and Dr Krishna Mohan Prabhu, general surgeon, Moodabidri, for their help in conducting literature review. Thanks are also due to Jayaram Kotian for his help in identification of the plant.

REFERENCES

1. Prajapati ND. A Hand Book of Medical Plants. 2003. Agrobios, India. p. 232.
2. Rizvi SSA. Toxicological and insecticidal activity of latex of *Euphorbia neriifolia* Linn. Indian J Pharmacol 1969; 1: 9.
3. Rasik AM, Shukla A, Patnaik GK, Dhawan BN, Kulshrestha DK, Srivastava S. Wound healing activity of latex of *Euphorbia neriifolia* Linn. Indian J Pharmacol 1996; 28(2): 107–109.
4. Lahon LC, Khanikor HN, Ahmed N. Preliminary study of local anaesthetic activity of *Euphorbia neriifolia* Linn. Indian J Pharmacol 1979; 11(3): 239–240.
5. Sharma PS. Rasatharangini. 11th edn, 1979. Chaukhambha Publications, New Delhi. p. 744.