Oral Symptoms Caused by Toxic Plants Containing Calcium Oxalate

A 1-year-old girl presented to our emergency room with lip swelling after biting the fruit of a wild plant. The plant was identified as *Arisaema serratum* through an internet search based on a photograph taken by her guardian (**Figure**, A). Her vital signs were normal. Physical examination revealed swelling and redness of the lower lip and erosion of the inner side of the lip (**Figure**, B). The pharyngeal findings were normal, and it was unlikely that the patient had swallowed *A serratum*. To relieve symptoms, she was treated with a topical wash with cold milk. Blood and urinalysis findings were normal; however, she was admitted to the hospital owing to pain and feeding difficulty.

During hospitalization, she had no renal dysfunction or electrolyte abnormalities and was negative for urinary oxalates. The lower lip swelling resolved within 24 hours. She was discharged on hospital day 3 because she could gradually take oral fluids. The tongue ulcer was still present at discharge (**Figure**, C). Her oral symptoms resolved within 1 week.

A serratum is a perennial herbaceous plant of the Araceae family and contains insoluble calcium oxalate, which causes toxicity owing to physical irritation by needle-shaped crystals. This leads to acute inflammation, including pain, redness, and swelling.[1,2] Typical plants containing calcium oxalate include *Dieffenbachia* and *Philodendron*, and there have been multiple reports of poisoning from these plants. In a previous report of patients who ingested *Dieffenbachia* or *Philodendron*, only 4 of 188 (2.1%) developed any symptoms.[2] However, some cases of apparent life-threatening events or sudden death with esophageal lesions have been reported in infants.[3,4] Because children less than 3 years of age constituted 76% of the cases of plant poisoning, careful follow-up is necessary, especially in a young children.[2] Our patient was determined not to have swallowed the plant, because she had only localized symptoms and did not develop acute renal failure or electrolyte abnormalities. ■

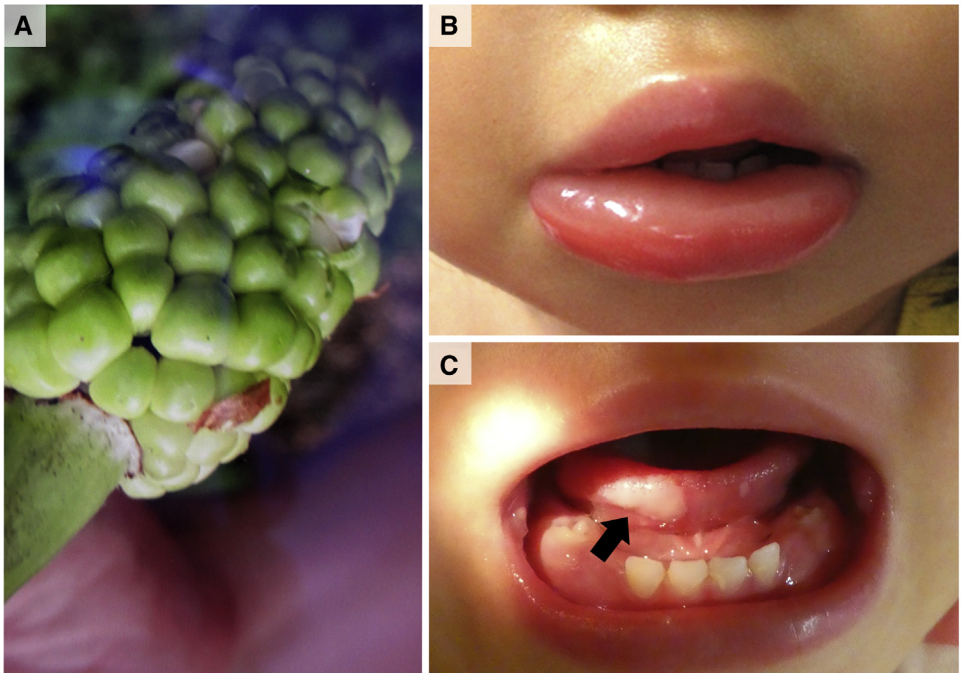

Figure. **A,** The photo taken by the guardian shows the toxic plant the patient bit. **B,** Swelling and redness of the lower lip. **C,** Tongue ulcer (*arrow*).

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