

Nivik Herb - Arum Maculatum – Poisoning

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Abstract

Nivik grass (*Arum maculatum*), which belongs to the Araceae family, is also known as snake's pillow, bear's ear, shadbush and kabargan. In the international literature, it is known as bobbins snakeshead, Adam and Eve, lords-andladies, arum, naked girls, soldiers diddies and wake robin.

Keywords: Nivik weed, mucosal damage, symptomatic treatment, public education

Introduction

Due to its strong acid content, it has an irritant effect on mucous membranes and may cause gastrointestinal side effects. Due to its similarity with other herbs such as spinach (Figure 1.a. b), which is widely consumed, it can be consumed inadvertently in nature. When consumed after boiling or drying, the effects are less pronounced. It is common in the Black Sea and Mediterranean regions. Plant roots are used for antipyretic and parasite treatment among the people. In the international literature, it is known as bobbins snakeshead, Adam and Eve, lords-andladies, arum, naked girls, soldiers did dies and wake robin¹⁻³.

Case

Our 40-year-old female patient bit the nivik grass which she had eaten about 30 minutes ago thinking it was spinach, but she did not swallow it (Figure 1c.). At the initial evaluation, general condition was good, conscious, coherent, and vital signs were stable. Physical examination revealed

hyperemia in the mouth and other findings were normal. After 4 hours of follow-up, the patient did not have any complaints and was informed about anaphylaxis and other possible complications and sent with recommendations. No complaint developed in 24-48 hours follow-up.

Discussion

The plant contains capsaicin (analgesia), lectin (antiparasitic) and saponin oxalate (mucosal damage). The saponin in the seasonally blooming red-orange fruits may cause allergic reactions. Studies have also reported that allergic reactions did not develop in patients who consumed the plant by boiling it. Oxalate-containing plants bind with calcium. Decreased calcium affects the heart, skeleton, kidney and nervous system. Cases of vomiting, seizure, spasticity, dyspnea, angioedema and death have been reported^{3,4}.

All parts of this wild plant have a strong irritating effect on mucous membranes. However, if it is boiled or dried for a long time, it becomes more harmless. Skin, mouth, tongue and this condition, which irritates the throat, results

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1a

1b

1c

Photo 1a: Nivik herb

1b. Spinach

1c. The nivik herb that the subject took into his mouth
(Pictures taken from the archive of Ali Karakuş)

in difficulty breathing and stomach discomfort, is caused by the plant the saponin oxalates it contains are responsible.⁵ In our case, mucosal edema and a tingling sensation occurred after ingestion. The symptoms subsided within an hour.

A. maculatum poisoning, previously reported In cases of severe poisoning, vomiting, seizure, spasticity, difficulty speaking, breathing. Symptoms such as stenosis have been observed.² The patient followed complained of numbness and swelling in the mouth.

Medicinal properties of Arum maculatum are proinflammatory, analgesic, antibacterial and antioxidant.⁶ Our subject accidentally ingested it.

Since there is no antidote, calcium carbonate, magnesium and diuresis treatments can be applied as symptomatic treatment to precipitate oxalate. Patients without symptoms can be discharged with recommendations after 4-6 hours of observation^{3,4}. Our patient, who did not develop any complications, was discharged with recommendations after six hours of observation.

Conclusion

Weeds commonly encountered in nature should be considered toxic until proven otherwise, and the public should be made

aware of anaphylaxis and other fatal conditions and should not consume unfamiliar foods. We believe that thus the cases of poisoning will decrease.

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