

# ANGIOEDEMA DUE TO ECBALLIUM ELATERIUM: CASE REPORT

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## ECBALLIUM ELATERIUM'A BAĞLI ANJİÖDEM: VAKA SUNUMU

### SUMMARY

Ecballium elaterium is a plant belonging to Cucurbitaceae family. The juice is widely used, by people in the eastern Mediterranean region, to treat sinusitis, because of its inherent anti-inflammatory properties. A 38-year-old man was presented to the emergency department with shortness of breath, burning and sting sense of the eye and (eyelid swelling) periorbital edema. In this presentation we aimed to show the adverse effects of Ecballium elaterium used for treatment purposes

**Key words:** Ecballium elaterium, emergency, folk remedies

### ÖZET

Ecballium elaterium Cucurbitaceae ailesinden bir bitkidir. Doğal antiinflamatuar özelliğinden dolayı Akdeniz bölgesi halkı tarafından sinüzit tedavisi için sık kullanılmaktadır. Elli yaşında erkek hasta acil servise nefes darlığı, gözde yanma ve batma hissi ve göz kapaklarında şişlik şikayetleriyle başvurmuştur. Bu sunumda tedavi amaçlı kullanılan Ecballium elaterium'a bağlı gelişen olumsuz etkilerin gösterilmesi amaçlanmıştır.

**Anahtar kelimeler:** Ecballium elaterium, acil, geleneksel

Ecballium elaterium is the scientific name of a plant belonging to Cucurbitaceae family. It is a decumbent, perennial herb indigenous to the Mediterranean region and cultivated in central Europe and England. The fruit is ovoid, fleshy, approximately 4 cm in length, when unripe of a pale green color, and covered with numerous, uniseriate glandular hairs<sup>(1)</sup>. The alleged uses of the fruit juice are as a potent cathartic, analgesic and anti-inflammatory agent<sup>(2,3)</sup>. The dilution is said to be 3rd to 30th potency. When used undiluted, the juice of this plant is highly toxic. Severe pain, swelling of the upper respiratory tract, dyspnoea and headache may be observed. Undiluted use of the juice can cause life-threatening situations<sup>(4)</sup>. The juice is also widely used, by people in the eastern Mediterranean region, to treat sinusitis, because of its inherent anti-inflammatory properties. The use of Ecballium elaterium in some allergy-prone patients causes adverse reactions, such as edema of the upper respiratory tract, resulting in an emergency situation<sup>(1)</sup>. In this presentation we aimed to show the adverse effects of Ecballium elaterium used for treatment purposes.

### CASE

A 38-year-old man was presented to the emergency department with shortness of breath, burning and sting sense of the eye and (eyelid swelling) periorbital edema. He stated that 12 hours previously he had aspirated intranasally undiluted fruit juice of Ecbalium elaterium as a folk remedy

for his sinusitis. In the physical examination he was conscious, TA: 100/70 mmHg, pulse rate: 80 bpm, respiration rate: 14 /min and he had periorbital edema, hyperemia of conjunctiva of both eyes and soft palate (*Figure 1*).

His laboratory findings were as follows: glucose: 95 mg/dL, SGOT: 28 U/L, SGPT: 30 U/L, BUN: 34 mg/dL, creatinine: 0.8 mg/dL, Na: 142 mEq/L, K: 4.3 mEq/L, WBC: 7500 /mm<sup>3</sup>, Hgb: 15 g/dL, Hct: 44.5%, Plt:250 000 /mm<sup>3</sup>. Chest X-ray was normal.

He was given supplemental oxygen, placed on a cardiac monitor and intravenous lines were established. 0.3 mg of a 1:10 000 epinephrine, 80 mg methylprednisolone, 50 mg diphenhydramine were given intravenously. The patient was in the observation unit for 12 hours and discharged with his previous state of health.

### DISCUSSION

Exposure to the juice of Ecbalium elaterium, mainly in its undiluted form, may cause irritation of the mucous membranes, mostly of an inflammatory nature. Patients exposed orally or intranasally should be closely followed for upper airway obstruction due to edema. In a small number of allergy-prone persons, the fruit juice of Ecballium elaterium causes allergic edema, which is located usually at the uvula or involves the nasal mucosa. In a few cases swelling occurs in other sites such as the lips, the tongue or even at multiple sites<sup>(4,5)</sup>. Our case differs from others by the presence of

periorbital edema and allergic conjunctivitis. He was given IV fluids, oxygen, epinephrine, steroids and antihistaminic drugs and discharged with well being.

Anaphylaxis is the most severe life-threatening form of systemic allergic reactions involving respiratory or cardiovascular compromise. The clinician must keep in mind that even in mild localized urticaria, angioedema can progress to full anaphylaxis<sup>(6)</sup>. The term angioneurotic edema describes several closely related diseases manifested by recurrent, acute edema of the skin or mucosa<sup>(7)</sup>. Patients admitted due to non-traumatic periorbital edema must be asked for the use of folk remedy. If the patient also had severe upper airway obstruction, early endotracheal intubation and permanent airway must be obtained. Then, they can be discharged from the emergency department after the supportive treatment with the drugs mentioned above.

### CONCLUSION

Despite of the rapid advances in modern medicine, people are still using alternative traditional medical methods very frequently. We think that as physicians we also have to accentuate patient education.

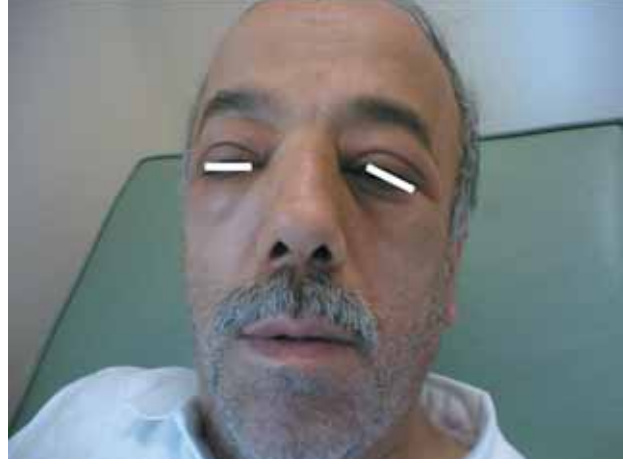


Figure of the patient

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