

### Acute irritant contact dermatitis due to 'apium graveolens'

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Acute irritant contact dermatitis is often the result of one single overwhelming exposure to an irritant or caustic chemical or a series of brief chemical or physical contacts. Most plants are harmless when in contact with the skin but some cause irritant, allergic, or phototoxic dermatitis. The chief irritant plant families are Ranunculaceae, Brassicaceae, Euphorbiaceae, and Boraginaceae (1). But we did not find any irritant contact dermatitis case report on *Apium graveolens* (celery) in the literature.

#### Case Story

A 69-year-old woman applied to our outpatient clinic with a complaint of burning and pain on her left knee for 5 D. From history, we learned that she applied a plant to her left knee and covered it with a cloth 5 D ago because of increasing pain of her knee for 3 months. After 2 hr, she

removed the leaves because she had burning and pain in the skin of her knee. She expressed that this was the first application and she was not exposed to the sun after application of the leaves. She did not reapply the leaves and did not use any other topical medicament.

On the dermatological examination, we observed erythema, oedema, exudation, and bulla formation on her left knee where the plant had been applied (Fig. 1). The patient was diagnosed as having an acute irritant contact dermatitis.

The patient was admitted to our clinic and asked to bring along the plant and photograph of the plant was taken (Fig. 2). Systemic corticosteroid and antihistamine, topical fucidic acid cream, and ethracidinlactate-monohydrate (Rivanol) were applied

to the patient. After recovery, we applied topical corticosteroid cream and hydrocolloid patch. Clinical improvement was observed on the 15th day of the treatment, and her lesions healed with hyperpigmentation (Fig. 3).

#### Discussion

Phytophotodermatitis is a skin eruption that occurs after contact with photosensitizing compounds in plants and exposure to ultraviolet light. Many plants have been identified that contain linear furocoumarins (=psoralens), including limes, lemons, and celery (2–5). *Apium graveolens* (celery) is from Umbelliferae family. Umbelliferae is from principal plant families giving phototoxic reactions (1).



Fig. 1. Clinical appearance of the patient after application of *Apium graveolens* (celery).



Fig. 2. *Apium graveolens* (celery).



Fig. 3. Clinical appearance after treatment.

Celery is a well-known plant in Turkey as a food, not a topical folk remedy. In the literature, there are a few reports with phytophotodermatitis due to celery. But we could not find any case report with irritant contact dermatitis due to *A. graveolens*.

Our case was diagnosed as acute irritant contact dermatitis, not phytophotodermatitis, because after application of celery she covered the leaves with a cloth and so was not exposed to the sun.

According to our knowledge, this is the first case report about irritant contact dermatitis due to celery in the literature.

Turkish people like to use plants to treat their illnesses by themselves. This kind of behaviour can result in adverse effects as happened in our patient. She had applied celery leaves to her knee to relieve pain and then developed acute irritant contact dermatitis.

We present this interesting case to show and discuss incorrect use of plants. We emphasize that the patients should not use the plants by themselves without medical advice and suggest that they should believe in medical treatments and doctors instead of plants.

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