CLINICAL SNAPSHOT

Accidental Thumb Injection With an Epinephrine Autoinjector

A 45-year-old woman presented to us after accidentally injecting herself in the thumb with an epinephrine autoinjector. The thumb was cold to palpation with blanching of the skin and delayed capillary refill, indicating hypoperfusion.

The patient was treated topically with a warming cream containing cayenne pepper, nitroglycerine spray, and local heat application, although the literature contains no clear evidence that such treatment is helpful. The clinical findings four hours later indicated complete reperfusion of the thumb, and no further treatment was needed. In particular, there was no need for multiple phentolamine injections, as described in the literature.

The number of epinephrine pens in circulation is steadily rising; this episode of accidental injection is hardly an isolated case. Even the high epinephrine dose that this patient received (corresponding to that of 99% of cases described in the literature) fortunately did not lead to necrosis or necessitate partial or total amputation. The currently available evidence does not clearly show either a need for treatment after epinephrine injection into a finger, or the efficacy of any such treatment, including the treatment our patient received. This matter needs further study.

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Blanching of the right thumb approximately 10 minutes after accidental injection with an epinephrine hydrochloride autoinjector.

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