

Bumps on the hand

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A young girl presented with flesh-colored lesions on her hands that were increasing in size and number (Figures 1 and 2). There were no associated symptoms. *What is your diagnosis?*



Figure 1. Numerous flesh-colored lesions on the dorsal hand.



Figure 2. Dome-shaped papules on bilateral fifth fingers.

DIAGNOSIS: This patient has two unrelated cutaneous lesions: verrucae (Figure 1) and rudimentary ulnar supernumerary digits (Figure 2). For both lesions, the diagnosis is based primarily on history and clinical findings.

DISCUSSION

There are numerous human papillomavirus (HPV) serotypes that cause a myriad of cutaneous lesions (1), most of which are benign but some of which are malignant. Most commonly, verrucae on the hand are flesh-colored exophytic verrucous papules associated with serotypes HPV-1, -2, -3, -4, -7, and -10. Trauma may spread lesions. Individual lesions oftentimes have minute punctate black dots, which represent thrombosed blood vessels. This clinical finding is an important distinguishing sign that aids in differentiating a verruca from a callus, which has a clear center.

The lesions in Figure 2 are smooth-domed papules present bilaterally on the fifth digits. These lesions were congenital and

are most consistent with rudimentary supernumerary digits. Rudimentary supernumerary digits are usually asymptomatic and typically occur at the base of the fifth digit on the ulnar side. While the exact etiology is unknown, these lesions are presumed to represent autoamputation or postnatal destruction of a supernumerary digit (2).

Treatment

Rudimentary supernumerary digits require no therapy. In contrast, therapeutic options for verrucae are numerous and are aimed primarily at local destruction and an increased host response to the viral infection (*Table*). The most common therapy in adults is cryosurgery with liquid nitrogen. Young children

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Table. Therapeutic options for verrucae*

Type	Examples
Destructive	Cantharone
	Cryosurgery
	Electrosurgery
	Laser (vaporization or pulse dye)
	Trichloroacetic acid
Immune-modulating	Intralesional bleomycin
	Intralesional injections (<i>Candida</i> , <i>Trichophyton</i> , or mumps antigen) (5)
	Intralesional interferon
	Cidofovir (6)
	Imiquimod cream 5% (7)
	Retinoids (systemic or topical)
	Vaccines (investigational)

*Options described in references 3 and 4, except as noted.

benefit from a less traumatic intervention such as over-the-counter topical salicylic acid preparations (e.g., Compound W, Occlusal, Sal-Acid, Wart-Off, DuoFilm, Dr. Scholl's Clear Away, Trans-Ver-Sal, or Mediplast), topical imiquimod (off label), or Cantharone. Usually numerous office visits are required to treat even one wart, and the number of visits required for patients with compromised immune systems (i.e., children, transplant patients, or AIDS patients) is even greater.

Because repeat visits and procedures are expensive and the procedures can be painful, some authors have reported on the utility of duct tape in removing warts (8). While this is a controversial therapy, the risks are minimal. If patients choose this option, the best results are obtained when they apply a salicylic acid over-the-counter preparation to the verruca and then apply duct tape over the affected area. The duct tape is left on for a week and then the above regimen is repeated until the lesions are gone. Usually an 8-week trial is necessary to see therapeutic benefit.

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