

# A multilocular blister on the finger

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A tender multilocular blister has developed on a man's finger over a few days. What is the cause and how may it be treated?

A 37-year-old man developed a tender multilocular blister on the distal aspect of his right ring finger (Figure 1). The blister had appeared over the previous three days. A Tzanck smear (a scraping of the blister contents fixed on a glass slide and stained) revealed enlarged keratinocytes that were multinucleated (Figure 2).

## Differential diagnosis

- **Acute paronychia** presents as a tender erythematous nodule that involves the nailfold and may extrude pus. Gram-positive organisms can often be cultured and are also seen in the smears of the exudate.
- **Warts** may be localised to the fingers, but they usually have a verrucous nonvesicular surface. Skin scraping may reveal vacuolated keratinocytes (koilocytes) with papillomavirus inclusions.
- **Orf** may present on a finger as an acutely inflamed papule with a crusted and vesicular surface. The lesion is induced by poxvirus, usually acquired by exposure to infected sheep. Skin biopsy shows reticular and viral degeneration of the epidermis, but multinucleated cells are absent.
- **Herpetic whitlow** is the correct diagnosis. It may present as a primary or recurrent multiloculated vesicular lesion that usually resolves spontaneously in seven to 14 days. Immunosuppressed patients may develop persistent atypical lesions that are ulcerated or hyperkeratotic.



Figure 1. Multilocular vesicle over the right ring finger.

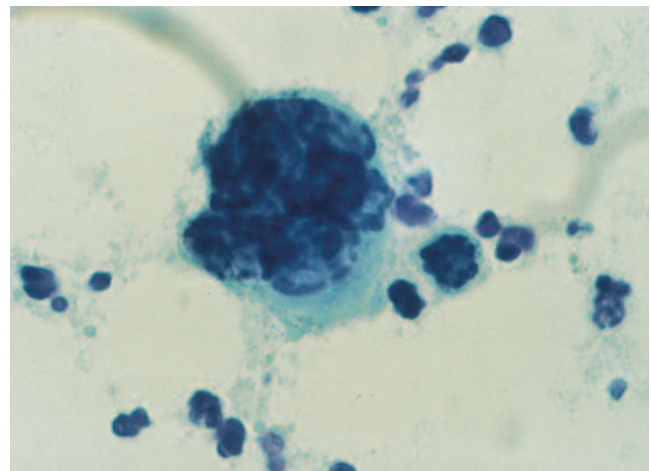


Figure 2. A smear of the blister content stained with Giemsa stain revealed multinucleated keratinocytes (Tzanck smear).

## Treatment

Treatment is often not needed for self-limited infrequent episodes, but oral antiviral therapy may be required for frequent recurrences or persistent lesions proven by viral culture or by a Tzanck smear revealing characteristic multinucleated cells. Aciclovir, famciclovir (Famvir) and valaciclovir (Valtrex) are effective. Active lesions should be covered to minimise risk of direct transmission.

## Keypoint

Herpes simplex viral vesicles may be recognised in unusual locations, such as the fingers, by their characteristic appearance and history.

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