

Isolated HSV-2 on the Helix Manifesting as a Single Large Vesicle in a Healthy Woman

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Sir,

I describe the first case report of a single isolated vesicle due to herpes simplex virus 2 on a healthy patient's helix. A 56-year-old white female had an ear "blister" occur and resolve seven times over the course of the previous year in the middle of her right helix. The "blister" did not itch, burn or hurt. She had no history of oral cold sores or visual, auditory or vestibular disturbance. She was heterosexual and was engaged in a monogamous marriage. She was HIV negative.

Her internist referred her for evaluation and suggested a diagnosis of relapsing polychondritis because his viral testing was negative. Such a diagnosis was unlikely because the lesion was unilateral and lacked cartilage involvement. On physical examination, she had a single fluid-filled whitish vesicle in the middle of the helix of her right ear (Fig. 1). No other lesions were present. A Tzanck preparation and a bacterial culture of the vesicle were negative. A biopsy performed to rule out a diagnosis of pseudocyst of the auricle showed a necrotic epidermis, neutrophils and mononuclear cells but no evidence of herpes or pseudocyst. However, a viral culture of the skin from the roof of the vesicle grew out HSV-2. The patient was treated with Valacyclovir 500 mg once a day for chronic suppression of HSV and 3 months later had no recurrences.

Herpes lesions can occur on facial areas from direct viral inoculation. This effect is best described as occurring in contact sports, e.g. rugby (termed scumpox) (1). A related condition occurs in wrestlers due to HSV-1 (termed herpes gladiatorum). This case is of particular interest because the



Fig. 1. Fluid-filled flaccid vesicle on the helix of the right ear.

patient did not give any history of close contact sports or possible event leading to direct inoculation. Notably, the lesion did not physically communicate with her eyes or auditory canal, which otherwise are common sites of herpes infections. No history of any previous herpes lesion was adduced. While HSV-2 is usually primarily a genital rather than a facial pathogen, its isolation fits into epidemiological trends. An increased frequency of HSV-1 in the genitals has been noted and is believed to be due to increased oro-genital sex and the prevalence of HIV (2).

Few reports describe auricular herpes alone. In one, an HIV-positive patient manifested with an ulcerated index finger nodule and an ulcerated lesion that extended from the pinna through the auditory canal from which HSV-2 was cultured (3). In a healthy 18-year-old Asian male, it was difficult to determine whether HSV-1, HSV-2 or varicella caused a large vesicle on the pinna, occlusion of the auricular canal and a band of erythema to the eye, although varicella was the most likely pathogen (4). Cases of scumpox typically occur on the neck, face and chest. No case occurring on the ear was found on a search of Medline.

Proper evaluation of vesicles requires viral testing to assess whether herpes is present. Atypical locations do not rule on herpes lesions, because herpes lesions may occur virtually anywhere on the body (5). Different tests for herpes offer different advantages. A Tzanck preparation, although the least sensitive test (which moreover cannot determine the type of herpes), can be done on the spot and is inexpensive. The rapid ELISA test has a sensitivity of 70–80% and the results are available within several hours. Viral culture of involved tissue is a sensitive means of diagnosing herpes and is done widely but can take days to yield a result. PCR is the most sensitive test for detecting HSV, but it presents some logistical complications and usually takes 24–48 h to perform. A skin biopsy looking for the presence of giant cells can be done if the above tests are negative. While the source of the infection was not found here, its identification and treatment led to a full disease remission underlying the need for comprehensive testing and evaluation of lesions suspected to be herpes.

REFERENCES

1. White WB Grant-Kels JM. Transmission of herpes simplex virus type 1 infection in rugby players. *JAMA* 1984; 252: 533–535.
2. Ramel F. Herpes and skin lesions: what's new? *Pathol Biol (Paris)* 2002; 50: 440–444.
3. Weaver G, Kostman JR. Inoculation herpes simplex virus infections in patients with AIDS: unusual appearance and location of lesions. *Clin Infect Dis* 1996; 22: 141–142.
4. Whallett EJ, Pahor AL. Herpes and the head and neck: the difficulties in diagnosis. *J Laryngol Otol* 1999; 113: 573–577.
5. Mindel A, Carney O, Williams P. Cutaneous herpes simplex infections. *Genitourin Med* 1990; 66: 14–15.