



Internal Medicine Flashcard

Painful lesions on the arms of a teenage wrestler

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1. Case

A previously healthy 16-year-old female wrestler presented with a 2-week history of a tender and pruritic rash involving the right anterior upper arm. She had not experienced fevers, chills, or malaise. She reported no history of similar oral or genital symptoms. Physical examination revealed several grouped vesicles on an erythematous base, along with crusted erosions, involving the right antecubital fossa (Fig. 1). The rash was not found elsewhere, and there was no associated lymphadenopathy. Prior to presentation, she went to another clinic, where was clinically diagnosed with staphylococcal skin infection and was started on oral and topical antibiotics. Her symptoms failed to respond after three days of therapy. Vesicular fluid was collected and sent for further analysis. What is the Diagnosis?

1.1. Diagnosis

Herpes gladiatorum; a herpes simplex virus type 1 (HSV-1) infection found in athletes in contact sports.

2. Discussion

Athletes involved in sports with skin-to-skin contact have increased

likelihood for introduction of HSV into areas of skin abrasion and excoriation. Cutaneous infection with HSV in wrestlers is termed herpetic gladiatorum (HG) [1,2]. Patients often describe a prodrome of burning, tingling or stinging of the affected skin [3]. This is followed by the appearance of umbilicated vesicles and pustules on an erythematous base [3,4]. These painful vesicles overlying an erythematous base can evolve into “punched out” erosions with hemorrhagic crusting or plaque development [2]. In addition to the lesions, some presentations of HG include painful lymphadenopathy and systemic symptoms of headache, fever, chills and malaise [4]. The vesicles normally heal within two weeks and leave no evidence of scarring [4].

Typically, the clinician has little difficulty in diagnosing classic intact vesicular HSV lesions (grouped vesicles). Yet athletes with HG are frequently misdiagnosed as the vesicles are often grazed or scraped during training and can appear as various types of dermatoses. As these sheared herpetic lesions appear similar to impetigo or folliculitis, athletes are often mistakenly prescribed antibiotics [4]. Thus, when examining a rash with erosions in a contact sport athlete, we advise clinicians to have a low threshold for obtaining a viral culture to rule out HSV. Athletes with HG should be separated from other participants and started on oral valacyclovir [4].

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Fig. 1. Grouped vesicles on an erythematous base, along with crusted erosions, involving the right antecubital fossa.

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Conflict of interest

All authors declare no conflicts of interest.

References

- [1] Selling B, Kibrick S. An outbreak of herpes simplex among wrestlers (herpes gladiatorum). *N Engl J Med* 1964;270:979–82.
- [2] Becker TM, Kodosi R, Bailey P, Lee F, Levandowski R, Nahmias AJ. Grappling with herpes: herpes gladiatorum. *Am J Sports Med* 1988;16:665–9.
- [3] Wilson EK, Deweber K, Berry JW, Wilckens JH. Cutaneous infections in wrestlers. *Sports Health* 2013;5:423–37.
- [4] Anderson BJ. The epidemiology and clinical analysis of several outbreaks of herpes gladiatorum. *Med Sci Sports Exerc* 2003;35:1809–14.