

Water-Slide Alopecia

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A 29-year-old male presented with large, symmetric, alopecic patches on the posterolateral aspects of both calves. A detailed history revealed that the individual had recently attended a water-slide amusement park. Repeated frictional trauma between the legs and the slide resulted in these alopecic patches. Friction, especially when encountered during sports-related and recreational activities, should be included in the differential diagnosis of well-defined alopecic patches.

Sports-related and recreational injuries are quite common. At water-slide amusement parks, cutaneous injury is not uncommon, and various traumatic cutaneous lesions have been reported.^{1,4} However, sports-related alopecia has been reported only rarely and usually occurs on the scalp.^{5,7} These lesions should be differentiated from other cutaneous disorders with similar findings, such as alopecia areata.

Case Report

A 29-year-old white male presented with a recent history of 2 large, round, alopecic patches on his calves. He denied any history of hair loss on other areas of his body. Physical examination of the posterolateral aspects of both lower legs revealed 2 large (approximately 7×12 cm), symmetric, well-defined, round, nonscarring, alopecic patches (Figure 1). There were no exclamation point hair or evidence of alopecia on other areas of his body (Figure 2, A and B).

On further investigation, the patient admitted to a recent visit to a water-slide amusement park. He had spent the afternoon racing down the slides on his back. During his descents, he kept only his back and posterolateral aspects of his legs in contact with the slide surface to maximize speed. The frictional forces created by this contact resulted in the symmetric alopecic patches.



Figure 1. Posterolateral aspects of the calves reveal 2 large, symmetric, alopecic patches. (Photograph courtesy of Eric Spada, MS.)

Comment

Water-slide amusement parks are a growing recreational diversion. These water slides are inclined planes made of fiberglass. They may be straight (often steep and quite fast) or curved and end in a shallow pool of water. For various safety precautions, individuals usually ride in the supine position. Despite attention to safety, water-slide injuries are not uncommon,^{1,4} with the most common injuries being cutaneous. Lacerations and abrasions constitute 44% to 78% of all water-slide accidents. Bone and teeth fractures, sprains, concussions, and other head injuries also occur.^{1,4} To my knowledge, alopecia has never been reported in an individual after water sliding.

Only rarely have recreational activities and sports been implicated in causing alopecia.^{5,7} Balance-beam alopecia occurs in gymnasts who, in repeated headstands and rollovers, apply intense traction to their scalp, leading to alopecia.⁵ Alopecia also has been reported in 2 individuals break dancing, whose constant spinning on their heads caused hair erosion.⁶ Finally, a woman developed a transverse alopecic patch on her scalp while running with tight headphones. Her hair loss improved when she changed to looser headphones.⁶

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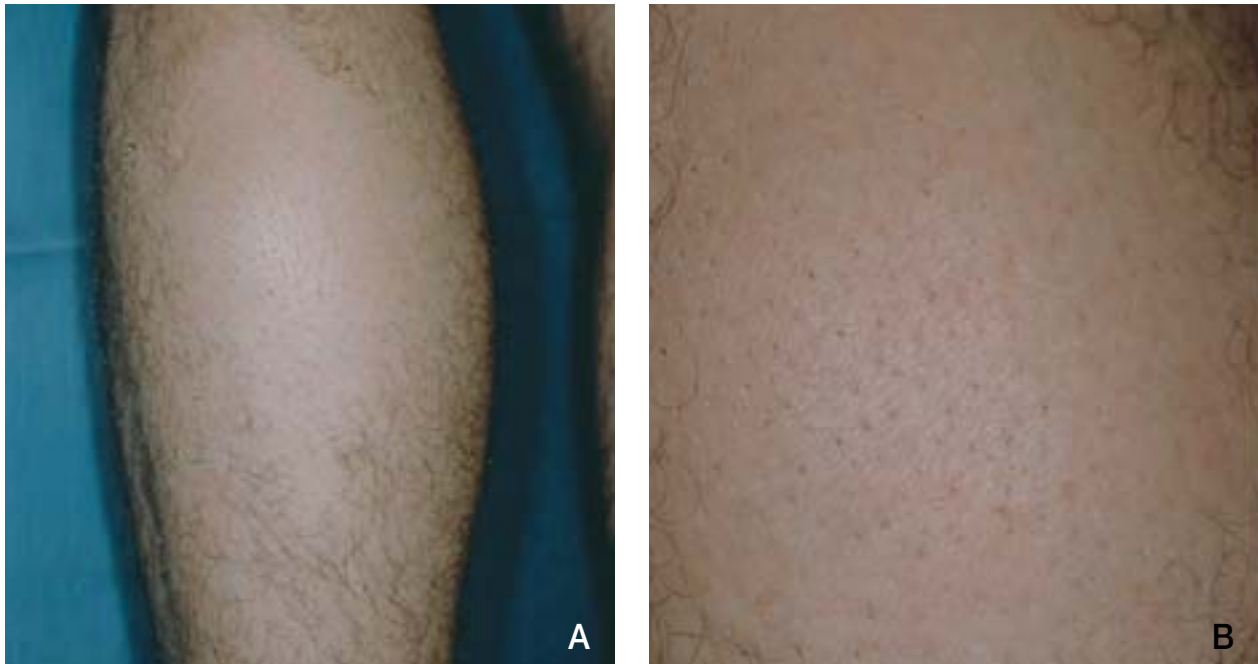


Figure 2. (A) One of the alopecic patches. (B) Note in the close-up view that there is no exclamation point hair. (Photographs courtesy of Eric Spada, MS.)

This case report illustrates the result of constant frictional forces on the hair shafts. Specific positioning while riding the water slide created symmetric patches that could be confused with alopecia areata. Careful questioning should determine if recreational or sport activities play a role in an individual's alopecia.

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