SKIN

BRIEF ARTICLE

Gamer's Dermatitis: When Victory Comes with a Rash

Aidan Maxwell,[1] Madison Anzelc,[2] Dawn Merritt[3]

[1] Division of Dermatology, University of Toledo College of Medicine and Life Sciences, Toledo, Ohio, USA
[2] Department of Dermatology, OhioHealth Riverside Methodist Hospital, Columbus, Ohio, USA
[3] Oakview Dermatology, Columbus, Ohio, USA

ABSTRACT

Background As video gaming has become increasingly common, dermatologists are seeing more skin changes related to prolonged play. Several conditions linked to gaming have been described, usually tied to friction, pressure, sweating, or irritation from equipment. We report a case of bilateral forearm lichenification that developed from repeated contact with a worn gaming chair, a pattern not widely reported.
Case Presentation A 32-year-old man presented with an itchy and occasionally tender rash on both elbows and dorsal forearms. He reported playing video games six to eight hours per day. While gaming, he rested his forearms on the chair's armrests, which had gradually worn down and lost their padding. He noted the rash flared when he played more frequently. On exam, he had well-defined, lichenified plaques with mild erythema in the areas where his arms contacted the chair. There were no vesicles, signs of infection, or systemic symptoms.
Discussion Most previously published gaming-related dermatoses involve the hands, particularly pressure points on the palms or thumbs. In this case, the distribution and appearance of the plaques suggested frictional injury from repeated rubbing against a rough surface. The history was key; the connection between his gaming habits and symptoms only became clear after asking specifically about his chair and how he positioned his arms.
Conclusion This case highlights the value of asking about gaming behaviors when evaluating localized dermatitis. Adjusting the patient's setup and using topical treatment can improve symptoms without requiring him to stop gaming.

INTRODUCTION

The rise of video gaming and continuous advancements in gaming technology have led to a growing number of documented dermatologic conditions associated with the use of gaming accessories and prolonged play. As these dermatologic issues are arising at an alarming rate, it is crucial to better understand their etiologies, possible points for preventative intervention, and treatment options. Previously described conditions include PlayStation palmar hidradenitis, PlayStation thumb, and periorbital hyperpigmentation, among others.[1-3] While there is no discrete pathogenesis behind these conditions, it is hypothesized to stem from repetitive mechanical trauma, prolonged friction and pressure, or allergic contact dermatitis from gaming accessories.[2] Nickel, for example, has been implicated in allergic reactions related to gaming controllers, keyboards, and mouse pads.[4] Given the increasing

prevalence of video-game related skin conditions, clinicians should consider gaming as a potential environmental causative factor when evaluating dermatologic concerns. This case describes a unique presentation of bilateral forearm lichenification in a young man following extended gaming sessions.

CASE REPORT

A 32-year-old male with a non-specific rash on bilateral elbows presented to dermatology. The patient reported pruritus and mild tenderness, which worsened following prolonged gaming sessions. He denied any recent changes to household or personal cleaning products or outdoor exposures. He also denied any prior history of atopic dermatitis, psoriasis, or other chronic dermatologic conditions. Upon further questioning, the patient disclosed that he spent between six to eight hours daily playing on his gaming system. While participating in this activity, he would rest his forearms on the worn-down arm rests extending from his chair. The patient endorsed that these arm rests used to have thin padding, but it has since been worn down to the hardwood given the repetitive rubbing of his arms across the surface while holding a controller.

Physical examination revealed well-defined, lichenified plaques with mild erythema on both elbows and dorsal forearms (**Figures 1-3**). No evidence of vesicles, ulceration, or systemic involvement was noted. Upon further discussion with the patient, he indicated that the rash tended to wax and wane depending on the frequency of his gaming and the state of the arm padding on his gaming chair. He also mentioned that he becomes very sweaty and often rubs his arms back and forth on the armrests when he gets excited or angry while playing. This discussion elucidated the clear connection between gaming, repeated friction, and the absence of padding which all contributed to his elbow lichenification.

Figure 1. Well demarcated lichenified plaque on the left posterior forearm and olecranon region

Figure 2. Scattered erythematous macules and papules coalescing on the right lateral forearm

Figure 3. Well demarcated lichenified plaque on the right posterior forearm and olecranon region

DISCUSSION

With the spike in video game usage amongst both adolescents and adults, there has been an increase in video gaming related dermatologic conditions being described in literature. One such case described by Kasraee et al. about a 12-year-old girl who presented with painful, erythematous nodules on her palms after excessive video gaming. She had been playing her PlayStation for several hours per day over the course of multiple weeks, during which she experienced increased friction and sweating on her hands from holding the controller. Dermatologic exam revealed deep-seated, tender, erythematous nodules localized to the palms without signs of infection. Bacterial and fungal testing ruled out infectious causes. The diagnosis of idiopathic palmar eccrine hidradenitis was confirmed by a histopathological examination demonstrating predominantly neutrophilic infiltration of the eccrine sweat glands in the absence of infectious agents. The nodules resolved spontaneously within 10 days after being advised to stop playing video games temporarily.[1] In another case described by Lee et al., a 14-year-old boy who had undergone bone marrow transplant for acute lymphoblastic leukemia (ALL) presented with multiple bilateral painful, erythematous nodules over his palms after playing on his computer for several hours a day. He was otherwise asymptomatic and afebrile. Histology revealed a focal neutrophilic inflammatory infiltrate surrounding the acrosyringium and eccrine sweat gland coils, consistent with palmar eccrine hidradenitis secondary to prolonged mechanical friction. This case also resolved spontaneously within two weeks of cessation of video game playing.[3] Lastly, Vaidya et al. described a cutaneous manifestation related to gaming in which a 9-year-old boy presented with painful blisters located on the tips of the thumbs as well as lichenified hyperkeratotic papules on the lateral aspects of the thumbs. Both sites corresponded to the exact site of recurrent pressure and friction with the controller of PlayStation. This condition is usually accompanied by nail alterations such as onycholysis overlying hyperkeratosis, as well as punctate hemorrhage on dermoscopy.[5]

These cases illustrate the diverse cutaneous manifestations associated with repetitive motions, prolonged pressure, mechanical friction and environmental exposures from gaming equipment. In our case, mechanical friction from repeated forearm contact against the roughened surface of the gaming chair led to localized lichenification, a rarely reported dermatologic consequence of prolonged gaming. The morphology and distribution of the lesions corresponded directly with the patient's habitual forearm positioning, emphasizing the importance of obtaining a detailed exposure history when evaluating unusual dermatologic presentations. Identifying behaviors and environmental triggers is essential for accurate diagnosis and personalized management.

While discontinuing or modifying habits may be the most direct intervention, achieving complete patient adherence can be challenging, especially in individuals for whom gaming is an important recreational activity. Instead, focusing on ergonomic adjustments, such as using properly cushioned supports or modifying forearm positioning can help minimize further skin trauma. Additionally, topical therapies such as emollients and corticosteroids have the ability to aid in reducing inflammation and promoting barrier repair. By implementing these strategies, resolution can often be achieved without necessitating a complete

cessation of video gaming and improve patient compliance and outcomes.

CONCLUSION

As video gaming continues to grow in popularity, clinicians should be aware of various gaming-related dermatologic conditions. This case underscores the importance of obtaining a detailed history and physical exam, particularly in regards to gaming habits and environmental exposures, in patients presenting with localized dermatologic changes. Early recognition and behavioral modifications can promote significant symptom improvement and prevent chronic skin changes. Further research is needed to understand the entire spectrum of gaming-related dermatologic conditions and establish preventative guidelines.

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Corresponding Author:
Aidan Maxwell
(567) 395-3378
Email: aidan.maxwell@rockets.utoledo.edu

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