

BRIEF ARTICLES

Analysis of Dermatologic Disorders Occurring in Major League Baseball Players

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ABSTRACT

Objective: To determine distribution of dermatologic disease among major league baseball (MLB) players and compare the distribution to that seen in the general population.

Design: Cross Sectional Survey

Setting: Data was collected via anonymous, online, randomized survey in January 2017.

Participants: Head athletic trainers for 25 MLB teams

Main Outcome Measures: The distribution of dermatologic disease encountered by MLB athletic trainers for players versus non-player personnel.

Results: The 3 most commonly encountered dermatologic conditions for MLB trainers among baseball players were blisters, contact dermatitis, and nail problems including onychomycosis. In contrast, the 3 most common dermatoses seen among the non-player personnel control group were rash, tinea, and concerning skin lesion which more closely resembled the distribution of skin diseases among the general population.

Conclusions: MLB players experienced a different mix with a greater proportion of mechanical, infectious, and contact related skin conditions likely due to the baseball-related activities that impact on these athletes' skin on a day-to-day basis. The prevalence of the dermatologic disorders noted in the study reinforces the importance of focused dermatologic education for trainers to enhance player care.

INTRODUCTION

The most common injuries that impact athletes are skin related.¹ Professional baseball players are subjected to physical and environmental stressors which may

interrupt their skin's protective barrier.² In addition to common dermatoses, repetitive mechanical trauma, excessive sweating, use of occlusive clothing/equipment, and communal use of equipment/facilities that is inherent to baseball activities may also

September 2017 Volume 1 Issue 2

predispose to sports-related skin disorders. These factors place athletes at higher risk for infection, mechanical skin injury, and exacerbation of pre-existing conditions that may inhibit their athletic performance or keep them off the field.

Athletic trainers (ATs) play a critical role in allowing baseball players to perform at the highest possible level. They must therefore be able to identify and manage common dermatologic problems. Multiple sports associated dermatoses have been described^{1,2} but the distribution of skin disease specific to baseball players, to our knowledge, has not yet been investigated. The purpose of this study was to examine the most common dermatoses Major League Baseball (MLB) ATs encounter among their team's players and compare this disease spectrum to what is seen in their non-player personnel and the general public.

METHODS

Online surveys were sent to the ATs of all 30 MLB teams in January 2017. Participants were provided with a list of 26 of the most commonly encountered skin conditions in the general US public³, with the order randomized for each participant, and asked to rank the conditions they most frequently encountered for MLB players and non-player personnel. Additionally, participants were surveyed about team access to a dermatologist. Results were analyzed and the groups were compared.

RESULTS

25 of 30 (83%) MLB ATs responded and completed all of the survey questions. The most commonly encountered dermatoses

among MLB players versus non-player personnel controls are summarized in Table 1. All responding ATs reported having access to a primary team dermatologist.

DISCUSSION

The distribution of skin diseases that MLB ATs encountered among non-player personnel closely resembled what has been noted in the general US population.³ However, MLB players experienced a different mix with a greater proportion of mechanical, infectious, and contact related skin conditions likely due to the baseball-related activities that impact on these athletes' skin on a day-to-day basis.

The MLB has partnered with the American Academy of Dermatology since 1999 for the Play Sun Smart program to promote skin cancer awareness. Dermatologists have been active in educating team medical staffs about issues related to sun protection and skin cancer. Based upon the results of this study, there may be the potential to expand this education to non-cancer dermatologic disorders that the ATs regularly encounter. A strong understanding of these common mechanical and infectious dermatoses is also important and the team dermatologist may be the best source to provide this knowledge.

As the understanding and treatment methods for these conditions evolve,^{4,5} it is important that ATs work collaboratively with dermatologists to stay up to date about the dermatoses that they most commonly encounter. Education that enhances the identification and efficient implementation of proper treatment has the potential to minimize the impact of skin disease on MLB player performance.

Table 1: The most common dermatoses among MLB players and non-player personnel

Most Commonly Encountered Skin Conditions		
Rank	MLB Players	Non-Player Personnel
1	Blisters	Rash
2	Contact Dermatitis	Tinea (groin, body, foot)
3	Onychomycosis or other nail problem	Concerning Skin Lesion (mole/skin cancer)
4	Ingrown Hair/Folliculitis	Onychomycosis or other nail problem
5	Tinea (groin, body or foot)	Folliculitis or ingrown hair
6	Rash	Contact Dermatitis
7	Callus	Sunburn
8	Ecchymosis/Contusion	Cyst
9	Other Bacterial Skin Infection (cellulitis/abscess)	Atopic Dermatitis
10	Verruca Vulgaris	Verruca Vulgaris

Conflict of Interest Disclosures: none.

Funding: none.

Acknowledgements: We thank the Major League Baseball athletic trainers for their response and participation in this survey.

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