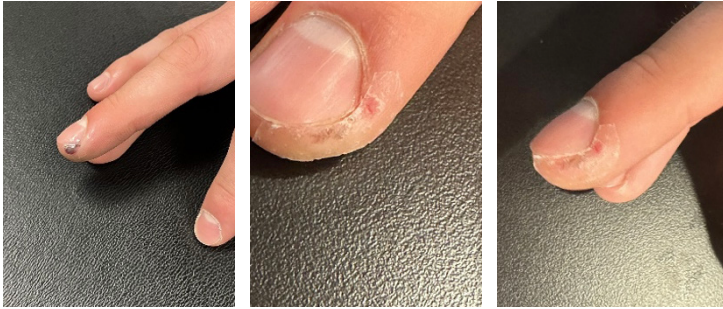


Finger Blister Management in Professional Baseball Pitchers

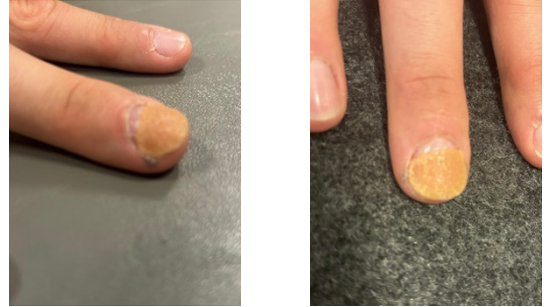
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Blisters form in response to friction and pressure. In pitchers, the repetitive motion of gripping and throwing at high speeds can cause the skin on the fingers to rub against the ball's seams, leading to blisters. While a blister may seem minor, if left unchecked, it can interfere with grip and affect the pitchers' performance.



Finger blisters are unique injuries specific to pitchers. The most common area for these blisters is the middle finger, followed by the index finger and less frequently on the thumb. These blisters typically form due to increased friction between the ball/seams and fingers. The friction usually increases as the hand gets clammy and damp. Approved antiperspirants and drying agents can be applied to help decrease moisture buildup on the hand. Poor nail and callous management are also factors that can cause blisters.

Nail management is key in preventing blisters. Nails should be maintained at a normal length (not too long or too short) and kept smooth and rounded without square or jagged edges. A good practice for pitchers prone to blisters is to evaluate the nail daily and lightly file it

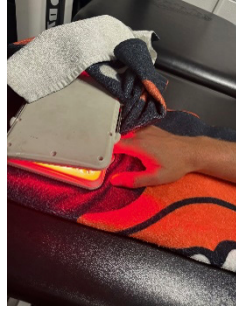


as needed to keep a rounded, smooth nail. If the nail is weakened or cracked, an acrylic nail or a mesh-glue backing can be administered to provide stability and prevent further damage.

Callus management is also vital in preventing blisters. A callus is a thickened area of skin that forms due to prolonged pressure or friction. It is a protective mechanism that shields the underlying tissues from damage. Blisters can also form underneath the callus, creating a more complicated management. Like nail management, calluses should be evaluated and maintained frequently. Shaving and filing the callus, keeping a smooth surface free of uneven edges, can keep the friction down and help prevent blisters.

Initial management of a blister can be tricky, especially if addressed mid-game. Initially, blisters should be aspirated/drained with a sterile needle in a sterile environment to decrease the chance of infection. After drainage, blisters can be covered with Dermabond or other sterile surgical glue. Pitchers are typically able to continue in the game with this covering. MLB and officials should be notified of any intervention or substance applied to the finger or hand.





After the pitcher's outing, management should be steered to infection control and tissue healing. Initial debriding of the superficial layer of the skin associated with the blister may be necessary, as this tissue is "dead tissue" and will not heal. Soaking the affected area in a mixture of warm water and betadine can be beneficial and help prevent infection.

Light therapy can be an aid in both tissue healing and infection control. It has been shown that red light therapy can help heal open wounds by increasing blood flow, reducing inflammation and stimulating collagen

and new cell production.¹ Blue light therapy has also shown beneficial properties in wound healing as well as bactericidal, anti-contamination and anti-inflammatory effects.²

Ointments and balms may also be utilized to aid in the healing process, prevent infection, as well as toughening the skin. Certain pharmacies can compound a variety of ointments to help with blister healing.

Finger blisters may seem like a minor condition but could escalate into a bigger issue if not managed properly. The utilization of comprehensive treatment and management strategies is vital in decreasing or eliminating missed time.

References

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2. Purbhoo-Makan M, Houreld NN, Enwemeka CS. The Effects of Blue Light on Human Fibroblasts and Diabetic Wound Healing. *Life (Basel)*. 2022 Sep 14;12(9):1431. doi: 10.3390/life12091431. PMID: 36143466; PMCID: PMC9505688.