

# The impact of a Cricket Ball - Open dislocation of the proximal interphalangeal joint

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## OBJECTIVES

Proximal interphalangeal joint (PIP) dislocations are injuries observed frequently and caused by axial loading on the finger in the extension. This case report discusses a traumatic open finger dislocation due to a ball hitting a young cricketer. It was successfully treated with reduction followed by volar plate and collateral bond fixation with absorbable sutures.

## BACKGROUND

During finger extension, axial loads can often cause PIP dislocations which can result in collateral bond injury, traumatic flexor tendon rupture, and incomplete volar plate injury. If these injuries are neglected or not treated appropriately, they may result in degenerative arthritis, joint pain, stiffness and instability.

## CASE DESCRIPTION

A twelve year old Indian boy presented to the Emergency department in a sub-urban Indian hospital while playing cricket with an open PIP joint dislocation of his index finger (X-ray shown in Figure 1) and a 2 cm deep laceration. This occurred due to the cricket ball forcefully hitting his left hand while he was wicket-keeping without his gloves.

Since this was a paediatric case, the patient underwent collateral bond and volar plate fixation with absorbable sutures. Moreover, the use of absorbable rather than non-absorbable sutures prevented granulomas, fibroses and similar complications due to the body's reaction to foreign materials.

There was minimal post-operative scarring and he regained function after a six month rehabilitation period. He experienced no pain, stiffness, or chronic instability post-rehabilitation.

## DISCUSSION

Upon scanning recent literature, there have been no case reports outlining open PIP joint dislocations in paediatric cases due to ball hitting. This case report showcases the importance of protective sports equipment in cricket matches in order to prevent serious traumatic injuries.



Figure 1 shows an x-ray portraying the patient's PIP dislocation of the left index finger.

## REFERENCES

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**DISCLOSURE:** Consent has been obtained from the patient to present this case.