



The Epidemiology of Field Hockey Injuries Presenting to an Adult Emergency Department



A Rowe, Dr S Clarke, Prof J Ryan

Emergency Department, St Vincent's University Hospital Elm Park, Dublin 4

Introduction

- Field hockey is the 2nd most commonly played team sport in the world
- In Leinster there are over 70 affiliated hockey clubs.
- Research into hockey related injuries is limited and may not reflect recent rule changes
- Pitch side studies report the lower limb as the most frequently affected site with ankle sprains the most common injury

Objectives

- To identify the nature of injuries sustained by hockey players presenting to the emergency department (ED)
- To evaluate the resources required by patients
- To assess the follow-up care patients receive

Methods

- A retrospective study was conducted of all hockey injuries presenting to the ED between May 2012 and October 2014
- The ED information system, MAXIMS© database, was searched for triage notes containing derivatives of the string 'hockey'

Figure 1 – Method of Injury

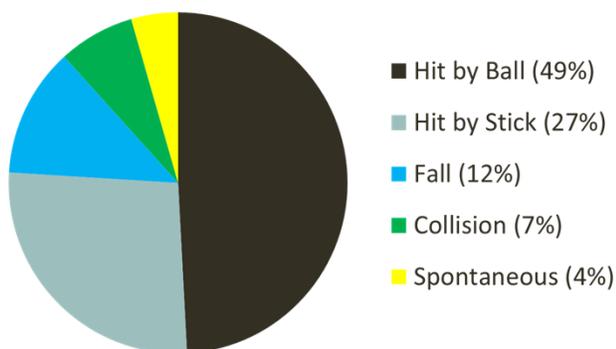
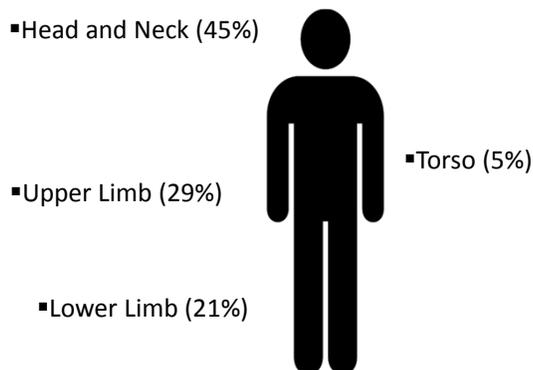


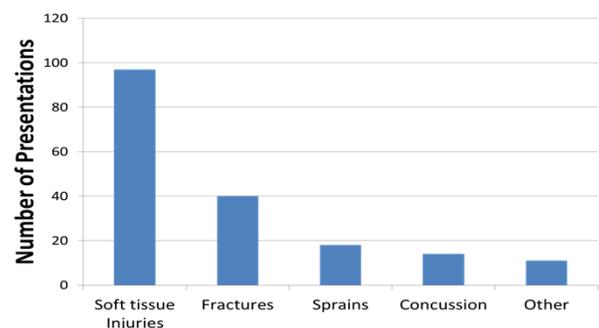
Figure 2 – Location of Injury



Results

- 256 presentations were identified, with 180 suitable for inclusion
- 63% (n=114) were female, 37% were male (n=66)
- Mechanism of injury was primarily from impact, either the ball or the stick (Fig.1)
- The head and neck was the most commonly injured site followed by upper limb and lower limb (Fig.2)
- Lacerations and soft tissue injuries accounted for the majority of presentations with fractures and strains well represented (Fig.3)
- 8% (n=14) suffered a concussion injury
- Serious injuries included a pneumothorax, a testicular haematoma and a jejunal haematoma
- 57% (n=102) required plain radiography while 13% (n=24) required advanced imaging (CT, ECHO, US)
- 14 were admitted to hospital, 8 as deferred admissions, with an average stay of 1.2 nights. All deferred admissions required surgery
- 27% (n=49) were referred to outpatient follow up, which was attended by 81% for an average of 2.1 visits
- Males were 3 times more likely to be admitted to hospital than females (12% v 4%)

Figure 3 - Type of Injury Presenting to the Department



Conclusions

- Hockey players present to EDs with a wide variety of injuries. Most injuries are minor and treated successfully but serious morbidity can occur
- It is possible that injuries presenting to the ED are at the more severe end of the spectrum
- Head and neck injuries are a concern and indicate a need for greater awareness about concussion in the hockey playing and coaching community
- Further research is needed to establish the potential benefits of protective headgear

References

Murtagh K 'Field Hockey Injuries' Current Sports Medicine Reports: September/October 2009 - Volume 8 - Issue 5
 Sherker S 'A Review of Field Hockey Injuries and Countermeasures for Prevention' Monash University Accident Research Centre 2002