Lacrosse stick entrapment injury to the thumb

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A case of injury to the left thumb following an errant stick check, and subsequent entrapment of the digit in the open sidewall of a lacrosse stick, is presented. A circumferential laceration, severe swelling, and bruising to the proximal phalanx resulted. This case report emphasises the need to limit the dimensions of openings in the sidewalls of lacrosse sticks to prevent the occurrence of this and other preventable injuries.

CASE REPORT

A 22 year old midfielder, running in pursuit of a ground ball, sustained a ring shaped laceration accompanied by significant swelling and bruising to the proximal phalanx of the thumb after an errant stick check by her defender. The defender's stick had an open sideway consisting of a single elongated opening. Contact resulted in the midfielder's thumb entering into and becoming entrapped in the sidewall. The defender, believing that her opponent was illegally grasping the head of the crosse, aggressively and repeatedly attempted to pull the stick away. The defender continued her attempts to free the stick until the umpire stepped between the two players. Given that the edges of the opening were sharp, some effort and care were required to extract the injured player's thumb from the crosse without incurring further damage. The injured midfielder immediately left the field and was treated by the team trainer. Upon examination, there was no obvious deformity and the player had full function of her thumb. A circumferential laceration at the base of the proximal phalanx was noted. Cryotherapy was used to reduce the swelling and to control the bruising, and the player returned to action the next day with protective bandaging.

DISCUSSION

A case of acute trauma resulting from an athlete's thumb becoming entrapped in the sidewall of an opponent's lacrosse stick has been reported. Although the true incidence of this opening. Contact resulted in the midfielder's thumb entering into and becoming entrapped in the sidewall. The defender, believing that her opponent was illegally grasping the head of the crosse, aggressively and repeatedly attempted to pull the stick away. The defender continued her attempts to free the stick until the umpire stepped between the two players. Given that the edges of the opening were sharp, some effort and care were required to extract the injured player's thumb from the crosse without incurring further damage. The injured midfielder immediately left the field and was treated by the team trainer. Upon examination, there was no obvious deformity and the player had full function of her thumb. A circumferential laceration at the base of the proximal phalanx was noted. Cryotherapy was used to reduce the swelling and to control the bruising, and the player returned to action the next day with protective bandaging.

DISCUSSION

A case of acute trauma resulting from an athlete's thumb becoming entrapped in the sidewall of an opponent's lacrosse stick has been reported. Although the true incidence of this
type of injury is unknown, such an occurrence could be prevented in the future by prohibiting in women’s lacrosse the use of moulded plastic crosse heads with openings large enough to allow entry of a finger or thumb. We recommend openings of no larger than 2 cm in length, width, or diameter. Two centimetres equals the diameter of a size 10 ring finger and is the approximate maximum dimension of openings found in one of the first and most popular open sidewall crosse heads used in the game during the late 1980s and early 1990s. We are not aware of any reports of finger entrapment associated with this particular crosse head. The openings should also have blunt or rounded edges so as to reduce the risk of lacerations. It is well documented that legislators in women’s lacrosse have long relied on rules and their strict enforcement to keep the game safe. We strongly urge the introduction of a rule limiting the dimensions of openings in the sidewalls of crosses to prevent entrapment injuries. Such a rule would not be required in men’s lacrosse in which heavily padded gloves are worn.

We have reported a case of laceration, bruising, and swelling to the proximal phalanx of the thumb in a young adult female, yet we feel that it would not be untoward to propose that the smaller fingers of younger, prepubescent athletes would be at risk for the same mechanism of injury. The resulting injury, moreover, could have been much more serious—for example, fracture, dislocation—if the defender had twisted or rotated the stick in her attempt to free it from the hand of the injured player. Action is required if these types of injuries are to be prevented in the future.

Take home message

Given that entrapment injuries may occur, the use of moulded plastic lacrosse sticks with large sidewall openings is not recommended in women’s lacrosse.

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