ABSTRACT

Background and Purpose: Hamstring injuries (HSI) occur more commonly in baseball than are often appreciated and can impact the potential career of a player. Little is known about the historical incidence of these injuries in summer league players preparing for their upcoming collegiate season or being drafted by major league team(s). Summer league baseball players have a high historical incidence of HSI which are often unknown at the start of their summer league play. The purpose of this study was to administer a validated questionnaire to assess various factors regarding the prevalence of prior hamstring injuries, current symptoms of posterior thigh pain or hamstring injuries in amateur summer league baseball players, and to provide details on the injury history, time lost from injury, injury recurrence, position, individual player physical characteristics and physical activities that might be associated with those injuries.

Study Design: Cross-sectional Observational Study

Method: A self-reported, validated questionnaire regarding the history, prevalence, reoccurrence and functional impact of HSI and posterior thigh pain was administered to and completed by 201 out of 251 summer league baseball players associated with the Cape Cod League and the Northwoods League at the start of the 2013-2015 seasons. The questionnaire was administered by certified athletic trainers associated with each team. Participation was voluntary and informed consent was obtained from all players.

Results: Forty-seven out of 201 players surveyed reported a HSI history. Sixty-six percent of these players (N=31) reported unilateral injuries and 34% (N=16) reported bilateral injuries. Reoccurrence rate was 27.7% across all players. Approximately 1/3rd of all position players (catchers 33.3%, infielders 32.6% and outfielders 31.6%) reported a HSI history compared to 12.9% of all pitchers. Significant differences (p<.05) existed between the HSI and Non-HSI groups for self-reported symptoms, soreness, and pain, as well as function and quality of life. Within the HSI history group, players who batted left and threw right reported the most injuries.

Conclusion: A large number of position players and pitchers who report for summer league baseball have a history of posterior thigh pain and HSI. Those with prior injuries have a high reoccurrence rate. Position players have a higher incidence of injury than do pitchers.

Level of Evidence: 3

Key Words: Baseball, hamstring injuries, Hamstring Outcome Score, incidence, movement system, posterior thigh pain

Conflicts of Interest: The authors received partial funding from Major League Baseball to conduct the study. Grant funds were solely used to fund the Certified Athletic Trainers associated with summer league teams for their assistance with questionnaire data collection. No other potential conflict of interest associated with this study are reported by the authors.

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