

PREVENTION OF ACL INJURIES IN FEMALE TEAM HANDBALL PLAYERS – A COMPLIANCE STUDY

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Introduction: Different studies have showed that neuromuscular and awareness training programs can reduce the rate of ACL injuries. However, neither these studies nor other injury prevention studies have examined program compliance. Compliance is usually poor in exercise programs, with typical dropout rate of 50% even in supervised programs. Thus, the aim of the present study was to evaluate the compliance with an ACL injury prevention training program.

Methods: Prior to the 1999-2000 team handball season a special training program was developed, consisting of three types of balance exercises, each with a 5-step progression from easy to more difficult. One set of the exercises was on the floor, one on a wobble board and one on a balance mat. In addition to teaching 'knee awareness' and neuromuscular control in a balancing stance, the exercises were also designed to encourage the players to use a narrower plant-and-cut maneuver, as well as a two-foot landing after a jump shot. A total of 58 female teams (950 players) in the three upper divisions were visited once during the pre-season to introduce the program and teach the exercises. The team coaches were asked to report the number of training sessions and time spent on the program after five weeks of training. Six of the teams were observed directly four to five times during the 5 wk period, to evaluate the organization and the quality of the execution of the exercises. Finally, two players from each of these six teams were interviewed (n=12) to get their subjective evaluation of the training programme. Good compliance was defined as an average attendance of 75% for at least 15 sessions.

Results: Based on the attendance records from the coaches only 26% of the teams were in good compliance of the program. In the elite division compliance was 42%, and in the division I and II was 23% and 22%, respectively. Team observations showed that the quality of the execution of the exercises was best when the players were given oral feedback, when the training sessions were timed, and supervised by physical therapists.

Conclusion: Compliance with the ACL injury prevention training program was low, and a more intensive teaching and supervision program appears to be necessary to improve this in the future.