

Comparing major joint injuries, interventions and late sequelae in elite male handball players with an age-matched control group

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INTRODUCTION

Handball is a contact sport which involves throwing and jumping, exposing players to serious physical stress. There is a high risk of injuries leading to possible long-term sequelae. The aim of this study was to assess the incidence of musculoskeletal injuries in elite male handball players compared with an age-matched control group.

PATIENTS AND METHODS

Former elite handball players, who had played on the Swiss national team between 1980 and 1985, answered a questionnaire about injuries, surgical interventions and their current health status. A total of 34 athletes were compared with 58 age-matched volunteers, who only engaged in recreational sports or no sports at all.

RESULTS

The mean age of the athletes was 58.4 years (range 52-68 years) and did not differ significantly from the mean age of the control group of 58.7 years (range 53-69 years). In the control group, 70 % engaged in recreational sports. There was no statistical difference regarding the life-long incidence of shoulder injuries and surgical interventions, sequelae or persistent shoulder pain. Athletes had more interventions after elbow injuries (0.09 vs. 0, $p = 0.047$), but the difference with respect to chronic pain or late sequelae was not statistically significant. For knee injuries, there were no significant differences regarding the incidence of injuries or interventions, the prevalence of secondary consequences or persistent pain. Concerning the foot and ankle, there was a significantly higher incidence of injuries (0.5 vs. 0.03, $p < 0.001$) and interventions (0.5 vs. 0.09, $p < 0.001$) in athletes, but no statistical difference regarding sequelae or persistent pain. Overall quality of life had identical ratings in both groups (athletes mean 85.9 %, controls mean 85.8 %).

DISCUSSION

Top handball players did not sustain more shoulder or knee injuries than the age-matched control group. The elbow was more at risk in these top athletes,



but long-term consequences appeared to be less severe. The most distinctive difference was seen in foot and ankle injuries.

CONCLUSIONS

A career as an elite handball player had no adverse effect on the overall quality of life of elite handball players 25 to 30 years after retiring from professional sports.

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