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Letter to editor

Stress Fracture Prevalence in Elite Figure Skaters

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Dear Editor-in-chief

Figure skating is a physically demanding sport that requires a unique combination of artistic ability, speed, agility, flexibility and power. During the last decades not only the competitive schedule has become tougher, but after introduction of the new judging system in 2003, also more emphasis is put on difficult technical elements, jumps, steps and spins (ISU Rules, [2006](#)).

More studies about possible increasing prevalence of stress fractures in figure skaters and contributing factors are lacking (Dubravcic-Simunjak et al., [2003](#); Moran, [2000](#); Pecina et al., [1990](#)). Therefore the aim of this study was to obtain data about the current stress fracture cumulative risk among elite junior and senior figure skaters, as well as possible factors that may contribute to stress fracture incidence.

An anonymous questionnaire, divided into 5 sections, inquired about the prevalence of stress fracture were mailed and distributed to all 62 International Skating Union (ISU) members by the ISU headquarters in Lausanne, Switzerland. The guidelines of the Helsinki declaration 2004 were followed.

From the 644 skaters who received the questionnaire, 412 completed ones were returned from 110 female juniors (78 single skaters, 12 pair skaters and 20 ice dancers) and 135 female seniors (97 single skaters, 16 pair skaters and 22 ice dancers) and from 79 male juniors (47 single skaters, 12 pair skaters and 20 ice dancers) and 88 male seniors (50 single skaters, 16 pair skaters and 22 ice dancers), coming from different ISU members. The response rate was 62% in females and 67% in males. The median age for female skaters was 16 years and for males 18 years (range 12-25 years).

