rerupture of the Achilles' tendon occurred in 3/93 (3.2%) of the subjects and had to been treated with open suture surgery. Overall, no infections, no wound healing failures and no thrombosis occurred in any of the patients.
Conclusions: Percutaneous suture of the ruptured Achilles' tendon of the athlete is a very promising alternative, as compared to the open surgical technique. By using the modification proposed here, the risk damage of the suralis nerve can be considerably decreased.

EXPOSURE IN ALPINE SKI RACING - REASONS FOR KNEE INJURIES AND OTHER SEVERE TRAUMAS

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INTRODUCTION
From the very beginning alpine ski racing has been regarded as a sport characterized by high exposure (Crim 2003). Apart from the classic anterior cruciate ligament (ACL) injury, an increase of complex injuries coupled with nearby-joint fractures of the lower limb, such as tibial condyle fractures, have been observed lately. Results on injury mechanisms or causal relationships, however, are not available at this time. Most previous studies were more concerned with statistical analyses of accidents in recreational skiing or biomechanical relationships regarding ACL-injury (Greenwald et al. 1997; Pecina 2002). Until this day there is a lack of extensive multidisciplinary studies on complex knee joint injuries including nearby-joint fractures. Based upon previous studies (Spitzenpfeil et al. 2005) this paper tries to focus on causes and consequences of overbalance situations for potential knee injuries by analyzing video recordings of downhill races from 1999-2003.
METHODS
Video tapes of nearly all elite downhill and super giant slalom ski races of the winter seasons 1999/2000 until 2002/2003 were digitized, compressed and stored. Based upon our previous studies a scheme of four overbalance categories (minor instabilities, major instabilities, almost crash, crash) was further developed and transferred into a SIMI Scout project. Additionally a new scheme of categories was developed to analyze crashes and their respective progression.
Additional data obtained for each overbalance situation were processed using the software SPSS to receive frequency counts. Comparisons were made between this data and that obtained in the previous studies.
RESULTS AND DISCUSSION
An increase of overbalance situation from 1999 (21%) to 2003 (49 %) could be detected. It is more dramatical in men than in women. The category "minor instabilities" recently occurs more frequently than crashes and almost crashes. Concerning potential reasons for ACL-injuries 20 % of the observed situations would fit into typical injury mechanisms like "phantom foot" (6%) or "boot induced" (20%). Dominating terrain for "phantom foot" related situations was the straight gliding phase facilitating the cause "false cutting". Detailed data concerning the progression of crashes will be presented at the congress.
References
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11:40 - 13:10

Invited symposium (IS)

IS2-06 The World Antidoping Code: from implementation to future challenges - "Athene"

INTERNATIONAL STANDARDS FOR LABORATORIES

Saugy, M.
Swiss Laboratory for doping analyses, Switzerland

The purpose of the International Standard for Laboratories is to ensure production of valid test results and evidentiary data and to achieve uniform and harmonized results and reporting from all accredited laboratories.
All laboratories are certified under the ISO 17025 rules. The World Anti-doping Agency has the duty to control the efficiency of the Laboratory network. External round tests are organized in order to improve the overall system and to be sure that the detection methods are fitting for the purpose defined in the World Anti-doping code. The chain of custody for any anti-doping sample must be strictly followed in order to prevent any formal discredit of a result. In some case, a second opinion on an adverse analytical result can be requested to assure an optimal result management. Research and development in the doping analyses are now formally part of the accreditaion scope of the accredited laboratories.
These international standards have been created in order to guaranty to the athletes similar treatment of their biological sample from the analytical point of view all over the world.