Objective To assess the current state of knowledge and practice regarding SRC (diagnosis, treatment, return to play) within the French-speaking sports community in order to tailor the prevention approaches.
Design Multicentric cross sectional survey.
Setting An online survey (~ 15 minutes completion time) was sent through mailing lists and social networks. The survey was available for three months and monthly reminders were sent.
Patients (or Participants) Athletes, sports healthcare professionals, and coaches through the ReFORM network
Interventions (or Assessment of Risk Factors) N/A
Main Outcome Measurements Reported level of knowledge regarding SRC and access to educational resources.
Results 2072 participants took part in the survey and 1704 finished it (completion rate: 82%). The sample included 48% of athletes, 33% of coaches and 19% of healthcare professionals. The main countries represented were France (35%), Canada (32%) and Belgium (12%). The preliminary analyses reported a SRC knowledge self-assessment as 'good' or 'excellent' in 87% of healthcare professionals and 69% of coaches; while more than 40% of athletes rated their knowledge as 'poor' or 'none'. Only 17% of athletes reported knowing about a SRC education programme in their setting against 63% for healthcare professionals and 45% for coaches. Regarding coaches, 54% do not feel having sufficient professional resources to correctly manage a SRC over the return to sports continuum.
Conclusions There seems to be a great interest from field stakeholders reflected by the completion rate. These preliminary results show a discrepancy in the level of SRC knowledge and the access to educational resources between athletes, coaches and healthcare professionals.

176 DO CERVICAL SPINE, VESTIBULO-OCULAR, DYNAMIC BALANCE, AND DIVIDED ATTENTION MEASURES IN ELITE YOUTH ICE HOCKEY PLAYERS RETURN TO BASELINE LEVELS AT TIME OF MEDICAL CLEARANCE TO RETURN TO PLAY?

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Background Evaluation of multiple sensory and motor domains at time of return to play (RTP) may inform risk of recurrent concussion and injury following concussion.
Objective To evaluate if measures of (1) cervical spine function, (2) vestibulo-ocular reflex (VOR) function, (3) dynamic balance and (4) tasks of divided attention have returned to preinjury levels at medical clearance to RTP in elite youth ice hockey players.
Design Case series nested in a prospective cohort study (n=559).
Setting Canadian youth ice hockey.
Participants Youth ice hockey players [13–17 years; n=45 (8 female, 37 male)].
Interventions Players who were diagnosed with an ice hockey-related concussion completed preseason and RTP measures.
Main Outcome Measurements Cervical spine measures (cervical flexor endurance test, head perturbation test, anterolateral strength, cervical flexion rotation test, joint position error), VOR tests [head thrust test, dynamic visual acuity (clinical and computerized)], dynamic balance tests (functional gait) and divided attention tasks (walking-while-talking-test WWTT) were included. Non-parametric (Wicoxon signed-rank, Stuart-Maxwell) analyses compared preseason to RTP scores.
Results Symptoms of dizziness, neck pain, and headache were reported by 29%, 18% and 20% fewer players at RTP than preseason respectively. Anterolateral cervical muscle strength ($z=-5.16$, $p<0.0001$) and joint position error (left) ($z=2.91$, $p=0.0036$) were poorer at RTP compared to preseason. The WWTT time ($z=-2.66$, $p=0.0079$) and FGA scores were improved at RTP ($z=-2.55$, $p=0.011$).
Conclusions Anterolateral cervical spine strength and joint position error (left) did not return to preseason values at RTP and may suggest incomplete recovery not indicated by symptoms at RTP. WWTT and dynamic balance were improved at RTP. Further evaluation of clinical outcomes on risk of subsequent injury following concussion is warranted.

177 PRIMARY PREVENTION OF SPORT-RELATED CONCUSSION IN YOUTH ICE HOCKEY: A PILOT RANDOMIZED CONTROLLED TRIAL

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Background Neuromuscular and sensorimotor training may reduce the risk of concussion.
Objective To evaluate the feasibility and efficacy of a concussion prevention neuromuscular training program in youth ice hockey.
Design Pilot cluster-randomized controlled trial.
Setting Canadian ice hockey.
Patients (or Participants) Youth ice hockey players (ages 13–17).
Interventions (or Assessment of Risk Factors) A study physiotherapist visited teams weekly for six weeks. Both study groups received standard concussion education and previously validated concussion surveillance. Intervention teams completed a progressive neuromuscular and sensorimotor training program (10–20 minutes per session) (including aerobic, balance, strength, agility, adaptation, cervical spine strength and dividing attention), on- and off-ice. Control teams completed their typical warm-up.
Main Outcome Measurements Recruitment, completion, retention rates, time and safety were used to evaluate feasibility. Sport-related concussion was defined using the 5th Consensus Statement on Concussion in Sport.