Ryan Kohler – concussion and return to play literature search.

Please find the results of your requested literature search on concussion and return to play

Some of the articles are available in full text. Where full text access is not available articles can be requested using the NSIC Document Request Form

Return-to-Play Decisions. (eng) By Laker SR, Physical Medicine And Rehabilitation Clinics Of North America [Phys Med Rehabil Clin N Am], ISSN: 1558-1381, 2011 Nov; Vol. 22 (4), pp. 619-34; PMID: 22050939;

Concussions occur as a result of forces directed to the head or neck, or from impulsive forces transmitted from the body to the head. They result in the rapid onset and spontaneous recovery of short-lived impairment of neurologic function. Concussions represent a functional, rather than structural, disturbance, and do not result in abnormalities on standard structural imaging. This article discusses a comprehensive approach to return to play in sports concussion, including managing athletes returning after prolonged postconcussion syndrome, multiple concussions, and intracranial hematomas and craniotomy. (Copyright Â© 2011. Published by Elsevier Inc.)

Database: MEDLINE with Full Text

Return-to-play guidelines in concussion: a closer look at the literature.

By Sabini RC, Nutini DN, The Physician And Sportsmedicine [Phys Sportsmed], ISSN: 0091-3847, 2011 Oct; Vol. 39 (3), pp. 23-30; PMID: 22030937;

Traumatic brain injuries that occur during sports have gained significant attention in the literature. Despite improved education and research on proper identification, risk management, and treatment, standardized methods for returning an athlete to play after a concussion are lacking in universal applicability. Current return-to-play guidelines are considered appropriate for the majority of athletes who recover within a few weeks. However, applicability of such guidelines becomes difficult when treating those athletes who experience prolonged symptoms or do not have the resources available to adequately manage complex presentations of concussions. Understanding the guidelines with consideration to special populations will assist the treating physician in providing an appropriate and individualized evaluation and treatment plan to safely return an athlete with a concussion back to play without compromising his or her health.

Database: MEDLINE with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Considerations for Return-to-Play and Retirement Decisions After Concussion.

By Cantu RC, Register-Mihalik JK, PM & R: The Journal Of Injury, Function, And Rehabilitation [PM R], ISSN: 1934-1563, 2011 Oct; Vol. 3 (10 Suppl 2), pp. S440-4; PMID: 22035687;

Return-to-play and retirement decisions after concussion are often difficult and complex. The complexity of these decisions may be influenced by many factors, including the number, proximity, and severity of previous concussions; gender; age; sport played; exposure to head impacts; and predisposing or pre-existing conditions. These circumstances and conditions can confound the decisions concerning return to play and retirement. Clinicians should carefully weigh how these circumstances and conditions influence quality of life and how they interact with the effects of concussion. Furthermore, clinicians should consider past and potential exposures to both subconcussive and concussive impacts during the athlete's lifetime when deliberating a return to play or retirement. The purpose of this overview is to highlight and discuss these issues as they factor into the return-to-play and retirement decisions after a concussive injury in an effort to provide clinicians with evidence-based information that can be used in the decision-making process.

Database: MEDLINE with Full Text

Subacute Symptoms of Sports-Related Concussion: Outpatient Management and Return to Play.

d'Hemecourt, Pierre, Clinics in Sports Medicine Jan2011, Vol. 30 Issue 1, p63

Abstract: The article focuses on the subacute symptoms of sports-related brain concussion. Concussion is defined as a complex pathophysiologic process induced by traumatic biomechanical forces that affect that brain. Concerns over return to play among athletes who suffered concussion are considered. The evaluation of athletes with persistent postconcussive symptoms is explained. The article also discusses the management of concussive symptoms.

Database: SPORTDiscus with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Future Advances and Areas of Future Focus in the Treatment of Sport-Related Concussion.

McCrory, Paul, Clinics in Sports Medicine Jan2011, Vol. 30 Issue 1, p201

Abstract: The article examines the areas which are likely to be the focus of future research on the treatment of sport-related concussion. It cites published evidence on the risk of concussion recurrence or sequale associated with return to play. It emphasizes the need to be vigilant for mental health problems linked with concussion. The clinical management of concussion in children is also discussed.

Database: SPORTDiscus with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Sensitivity and Specificity of Subacute Computerized Neurocognitive Testing and Symptom Evaluation in Predicting Outcomes After Sports-Related Concussion.

Lau, Brian C.; Collins, Michael W.; Lovell, Mark R., American Journal of Sports Medicine Jun2011, Vol. 39 Issue 6, p1209

Abstract: Background: Concussions affect an estimated 136 000 high school athletes yearly. Computerized neurocognitive testing has been shown to be appropriately sensitive and specific in diagnosing concussions, but no studies have assessed its utility to predict length of recovery. Determining prognosis during subacute recovery after sports concussion will help clinicians more confidently address return-to-play and academic decisions.Purpose: To quantify the prognostic ability of computerized neurocognitive testing in combination with symptoms during the subacute recovery phase from sports-related concussion.Study Design: Cohort study (prognosis); Level of evidence, 2.Methods: In sum, 108 male high school football athletes completed a computer-based neurocognitive test battery within 2.23 days of injury and were followed until returned to play as set by international guidelines. Athletes were grouped into protracted recovery (>14 days; n = 50) or short-recovery (≤14 days; n = 58). Separate discriminant function analyses were performed using total symptom score on Post-Concussion Symptom Scale, symptom clusters (migraine, cognitive, sleep, neuropsychiatric), and Immediate Postconcussion Assessment and Cognitive Testing neurocognitive scores (verbal memory, visual memory, reaction time, processing speed).Results: Multiple discriminant function analyses revealed that the combination of 4 symptom clusters and 4 neurocognitive composite scores had the highest sensitivity (65.22%), specificity (80.36%), positive predictive value (73.17%), and negative predictive value (73.80%) in predicting protracted recovery. Discriminant function analyses of total symptoms on the Post-Concussion Symptom Scale alone had a sensitivity of 40.81%; specificity, 79.31%; positive predictive value, 62.50%; and negative predictive value, 61.33%. The 4 symptom clusters alone discriminant function analyses had a sensitivity of 46.94%; specificity, 77.20%; positive predictive value, 63.90%; and negative predictive value, 62.86%. Discriminant function analyses of the 4 computerized neurocognitive scores alone had a sensitivity of 53.20%; specificity, 75.44%; positive predictive value, 64.10%; and negative predictive value, 66.15%.Conclusion: The use of computerized neurocognitive testing in conjunction with symptom clusters results improves sensitivity, specificity, positive predictive value, and negative predictive value of predicting protracted recovery compared with each used alone. There is also a net increase in sensitivity of 24.41% when using neurocognitive testing and symptom clusters together compared with using total symptoms on Post-Concussion Symptom Scale alone.

Database: SPORTDiscus with Full Text

Linked Full Text

Controversies in concussion management: who should clear the athlete to return to play?

(eng) By Crutchfield KE, Ferrell JL, Maryland Medicine: MM: A Publication Of MEDCHI, The Maryland State Medical Society [Md Med], ISSN: 1538-2656, 2011; Vol. 12 (1), pp. 13-4, 20; PMID: 21657171

Database: MEDLINE with Full Text

Return to play after an initial or recurrent concussion in a prospective study of physician-observed junior ice hockey concussions: implications for return to play after a concussion.

By Echlin PS, Tator CH, Cusimano MD, Cantu RC, Taunton JE, Upshur RE, Czarnota M, Hall CR, Johnson AM, Forwell LA, Driediger M, Skopelja EN, Neurosurgical Focus [Neurosurg Focus], ISSN: 1092-0684, 2010 Nov; Vol. 29 (5), pp. E5; PMID: 21039139;

The authors investigated return-to-play duration for initial and recurrent concussion in the same season in 2 teams of junior (16-21-year-old) ice hockey players during a regular season.

Database: MEDLINE with Full Text

Natural history of concussion in sport: markers of severity and implications for management.

By Makdissi M, Darby D, Maruff P, Ugoni A, Brukner P, McCrory PR, The American Journal Of Sports Medicine [Am J Sports Med], ISSN: 1552-3365, 2010 Mar; Vol. 38 (3), pp. 464-71; PMID: 20194953;

Evidence-based clinical data are required for safe return to play after concussion in sport.

Database: MEDLINE with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Same-day return to play? Not for young athletes.

By McLeod TV, The Journal Of Family Practice [J Fam Pract], ISSN: 1533-7294, 2009 Oct; Vol. 58 (10), pp. 512-3; author reply 513; PMID: 19886005

Database: MEDLINE with Full Text

PDF Full Text

What are the most appropriate return-to-play guidelines for concussed child athletes?

L Purcell, British Journal of Sports Medicine May2009, Vol. 43 Issue 0, pi51

Abstract: OBJECTIVE: To examine concussion literature for specific guidelines regarding return to play (RTP) following sport-related concussion in child athletes. To make recommendations regarding the most appropriate RTP guidelines for child athletes following sport-related concussion. DESIGN: A literature review of concussion literature. INTERVENTION: A literature search was conducted using Medline and Embase databases from 1998 to 2008. More than 60 articles and two websites were reviewed. RESULTS: There is a paucity of research on sport-related concussion in child athletes, particularly younger children (age 5–12 years). In particular, there is no research on RTP guidelines for child athletes following sport-related concussion. Child athletes take longer to recover from concussions than adults. Concussion symptoms may resolve before cognitive function has completely recovered. Concussion assessment and management in children can be confounded by their growth and development, as well as the lack of trained medical personnel involved with youth sports. There are no child-specific assessment tools for concussion. CONCLUSIONS: RTP decisions in children should be made cautiously and should be individualised. No concussed child athlete should be allowed to RTP the same day. Physical and cognitive rest is very important to allow for the resolution of concussion symptoms. Child athletes should remain symptom free for several days before starting a medically supervised stepwise exertion protocol. Further research is needed to elucidate the effects of concussion in children and to determine the most appropriate RTP guidelines. Child-specific concussion assessment tools need to be developed to improve concussion assessment and management in children.

Database: SPORTDiscus with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Return to play after sports concussion in elite and non-elite athletes?

By Putukian M, Aubry M, McCrory P, British Journal Of Sports Medicine [Br J Sports Med], ISSN: 1473-0480, 2009 May; Vol. 43 Suppl 1, pp. i28-31; PMID: 19433421;

To examine the published literature relating to the difference in concussion management strategies between elite and non-elite athletes.

Database: MEDLINE with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Return-to-play criteria after athletic concussion: a need for revision.

By Mayers L, Archives Of Neurology [Arch Neurol], ISSN: 1538-3687, 2008 Sep; Vol. 65 (9), pp. 1158-61; PMID: 18779417; Management of a sport-related concussion, especially involving return-to-play decisions, is one of the most important challenges confronting sports medicine professionals. Current guidelines result from thoughtful consensus recommendations by expert committees but are chiefly based on the resolution of symptoms and the results of neuropsychological testing, if available. Adherence to this paradigm results in most injured athletes resuming competition in 1 to 2 weeks.

Database: MEDLINE with Full Text

Repeat mild traumatic brain injury: how to adjust return to play guidelines.

By Putukian M, Current Sports Medicine Reports [Curr Sports Med Rep], ISSN: 1537-8918, 2006 Feb; Vol. 5 (1), pp. 15-22; PMID: 16483512;

Determining when it is safe for an athlete to return to play (RTP) after concussion is one of the most difficult decisions facing the team physician. There is significant variability in the evaluation and management of mild traumatic brain injury (mTBI). In the past decade, a tremendous amount of sport-specific research has improved our understanding of mTBI. The advent of neuro-psychologic (NP) testing batteries designed to assess concussive injury has improved the assessment of cognitive dysfunction that occurs in the absence of structural brain abnormalities. The severity of injury is determined by the nature, burden, and duration of symptoms. Athletes must be asymptomatic and have a normal neurologic and cognitive evaluation prior to RTP. Several factors aid in making the RTP decision, including age, the severity of injury, and history of prior mTBIs. Given the potential complications of mTBI, the RTP decision must be made using a thoughtful, individualized process.

Subjects: Athletic Injuries rehabilitation; Brain Concussion rehabilitation

Database: MEDLINE with Full Text

PDF Full Text

Sport-related concussion: factors associated with prolonged return to play.

By Asplund CA, McKeag DB, Olsen CH, Clinical Journal Of Sport Medicine: Official Journal Of The Canadian Academy Of Sport Medicine [Clin J Sport Med], ISSN: 1050-642X, 2004 Nov; Vol. 14 (6), pp. 339-43; PMID: 15523205; To assess predictive value of concussion signs and symptoms based on return-to-play timelines.

Database: MEDLINE with Full Text

Linked Full Text

Notes: National Sport Information Centre holds this title

Return to play following sports-related mild traumatic brain injury: the role for neuropsychology.

By Echemendia RJ, Cantu RC, Applied Neuropsychology [Appl Neuropsychol], ISSN: 0908-4282, 2003; Vol. 10 (1), pp. 48-55; PMID: 12734075;

Cerebral concussions frequently occur at all levels of athletic competition. The effects from these concussions can be transient or may lead to chronic, debilitating symptoms. A growing literature has established that neuropsychological tests are useful in detecting the subtle neurocognitive changes that occur following concussions. The identification of these deficits and subsequent recovery of function can be important components in making return-to-play (RTP) decisions. This article describes the emergence of neuropsychology in sports medicine, discusses the context in which RTP decisions are made, outlines factors that are important to RTP decisions, and presents a model that views the RTP decision as a dynamic risk-benefit analysis that involves complex interactions among variables. It is argued that neuropsychology has a unique, but not exclusive, role in the decision making process. Implications for future research are discussed.

Database: MEDLINE with Full Text

PDF Full Text