Biology of Sport

pISSN 0860-021X

Editorial Board Editorial Staff Instructions for Authors

Current issue

Archival Issues

Volume 27, 2010

Volume 26, 2009

Volume 25, 2008

Volume 24, 2007

Volume 23, 2006

Volume 22, 2005

Volume 21, 2004

Volume 20, 2003

Search

Newsletter

Authors Pathway

Information for Authors





Journal Abstract

Medial collateral ligament repair following complete ligament transection: an experimental study in rabbits

E Carmeli, Y Beer, N Halperin, R Coleman, D Robinson, T Brosh, Z Nevo

Biol Sport 2004; 21 (4):

ICID: 891743

Article type: Original article

IC™ Value: 10.26

Abstract provided by Publisher



The purpose of this study was to evaluate the repair processes of the medial collateral (MCL), lateral collateral (LCL), anterior cruciate (ACL) and posterior cruciate (PCL) ligaments after complete dislocation by arthrotomy, and after disconnection. Forty eight mature young male white New Zealand rabbits. All four ligaments were reconnected using non-absorbable sutures, without limb immobilization. The contralateral knees served as internal controls. The effectiveness of Diclofenac (Voltaren, an NSAID), hyaluronic acid, and hyaluronic acid combined with collagenase in the healing processes was examined. 12 non-operated rabbits (control group) received intraarticular injections of 1 ml 0.9% saline 3 per week for 3 weeks; 12 rabbits received intramuscular (Glutei) injections of Diclofenac sodium 1% (1ml/1kg BW) 3 per week for 3 weeks; 12 rabbits received intraarticular injections with 1 ml hyaluronic acid alone; 12 rabbits received intraarticular injections of hyaluronic acid and collagenase. Biomechanical and histological examinations of the joints were performed. The results indicated that healing of ACL and PCL was not achieved in any group. A favorable response to Diclofenac treatment was noticed in MCL as determined by both histology and biomechanical testing. In conclusions, Diclofenac administered by injections may offer some clinical benefits following major knee operations or injury.

ICID 891743

FULL TEXT 524 KB

Related articles

- in IndexCopernicus™
 - treatment [441 related records]
 - Ligament [3 related records]