

LETTERS

TREATING ACL INJURIES

Authors' response to editorial by Levy and colleagues on treating ACL injuries in young moderately active adults

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Levy and colleagues misinterpreted our report on the five year outcome of treatment for rupture of the anterior cruciate ligament (ACL).^{1 2}

We assessed whether structured rehabilitation plus early ACL reconstructive surgery was superior to structured rehabilitation with optional delayed reconstruction.³ We found no significant differences in primary or secondary outcomes between the two treatment strategies at five years. Knee stability was better in patients with surgical reconstruction but this did not translate into functional success. The median preinjury activity level of 9/10 indicated participation in competitive sports. Some 40% were active at their preinjury level at two years after injury,³ decreasing to 20% at five years,² with no difference between groups. Our results are consistent with a meta-analysis showing that 22-61% return to competitive sports.⁴

Levy and colleagues incorrectly stated that “significantly more meniscal procedures were performed in the optional delayed group.” We reported that at two years: “Subjects assigned to rehabilitation plus early ACL reconstruction had a higher frequency of meniscal surgery at study initiation and a lower frequency of delayed meniscal surgery than did subjects assigned to rehabilitation plus optional delayed ACL reconstruction. Overall, the number of meniscal operations in the two groups

totalled 40 and 50, respectively (P=0.20).”³ After five years, we again found no significant differences in meniscus surgery when analysed by intention to treat or as treated.² At five years after ACL rupture, we found no significant differences in radiographic osteoarthritis between the treatment groups.²

The practice of evidence based orthopaedics means integrating individual clinical expertise with the best available external clinical evidence from systematic research.⁵ The KANON trial currently represents the highest level clinical evidence.

Competing interests: None declared.

Full response at www.bmj.com/content/346/bmj.f963/rr/636667.

- 1 Levy BA, Krych AJ, Dahm DL, Stuart MJ. Treating ACL injuries in young moderately active adults. *BMJ* 2013;346:f963. (13 February.)
- 2 Frobell RB, Roos HP, Roos EM, Roemer FW, Ranstam J, Lohmander LS. Treatment for acute anterior cruciate ligament tear: five year outcome of randomised trial. *BMJ* 2013;346:f232. (24 January.)
- 3 Frobell RB, Roos EM, Roos HP, Ranstam J, Lohmander LS. A randomized trial of treatment for acute anterior cruciate ligament tears. *N Engl J Med* 2010;363:331-42.
- 4 Ardern CL, Webster KE, Taylor NF, Feller JA. Return to sport following anterior cruciate ligament reconstruction surgery: a systematic review and meta-analysis of the state of play. *Br J Sports Med* 2011;45:596-606.
- 5 Sackett DL. Evidence based medicine: what it is and what it isn't. *BMJ* 1996;312:71.

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