QUESTION

DO YOU MANAGE THE PATIENT DIFFERENTLY IF A CONCURRENT MENISCAL REPAIR WAS PERFORMED?

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Numerous studies have reported improved healing rates for meniscal repairs when performed concurrently with anterior cruciate ligament (ACL) reconstruction (Table 23-1). Barber and Click demonstrated in 1997 that patients undergoing simultaneous ACL reconstruction with meniscal repair had a 92% healing rate in ACL-reconstructed knees, versus 67% in ACL-deficient knees.¹ There are several possible explanations for this, including a blood-filled joint and the elimination of joint instability, all of which lead to a more favorable healing environment for the meniscal repair.²

Other than a minor alteration in weight-bearing status, there is no difference in our rehabilitation for an ACL reconstruction with concomitant meniscal repair compared to that done for an ACL reconstruction performed in isolation.³ We allow our patients who have simultaneous ACL reconstruction and meniscal repairs to be weight bearing as tolerated in extension. We do not allow any weight bearing in flexion of 90 degrees or more for 4 weeks. After 4 weeks, progressive weight bearing in flexion is allowed.

The rationale for this restriction of weight bearing in higher degrees of flexion is supported by work by Thompson et al, who demonstrated 5.1 mm of posterior displacement of the medial meniscus with flexion and 11.2 mm of displacement for the lateral meniscus. Numerous causes for meniscal repair failure have been hypothesized. However, the most predictable measures of repair success are tear pattern and vascularity at the site of the meniscal tear, with longitudinal tears in the red-red zone having the highest rates of healing.⁶ A recent study showed that loads across a lateral meniscal repair are compressive throughout flexion and extension, with the highest loads measured in full extension and the lowest loads at 90 degrees of flexion.⁴ Our belief is that this amount of displacement may cause significant shearing at the repair site and contribute to failure of the meniscal repair.

Table 23-1

Results of Meniscal Repair Performed in Conjunction With Anterior Cruciate Ligament Reconstruction

Author and Year	Number of Meniscal Repairs	Mean Follow-Up (Months)	Results
Tenuta and Arciero, 1994 ⁵	40	11	90% Healed
Buseck and Noyes, 1991 ⁶	79	12	80% Healed completely 14% Healed partially
Miller, 1988 ⁷	60	39	93% Healed

Many orthopedic surgeons do not change their rehabilitation protocols for their patients with concomitant meniscal repairs, following the ACL protocol as usual, and have reported no significant adverse outcomes and comparable meniscal repair healing rates.^{6,8-10}

Disclaimer

The views expressed in this article are those of the author and do not necessarily reflect the official policy or position of the Department of the Navy, Department of Defense, nor the United States Government.

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