

Clinical Experience with the CMI

Clinical studies conducted in the U.S. and Europe prove that the CMI supports the growth of new meniscus-like tissue and demonstrated favorable clinical outcomes.^{3,4,5}

- Patients that received a CMI experienced significantly reduced pain and frequently regained more of their pre-injury activity level than partial meniscectomy alone.³
- Over 84% of CMI patients showed new tissue growth and, on average, patients that received the CMI in this study regained over 70% of their original meniscal tissue area.³
- Two separate CMI studies with follow-up past 10 years showed a significant reduction in pain, improvement in function and activity level and improved radiologic outcomes at last follow-up.^{4,5}

Please speak with your physician to learn about the available options for meniscus preservation and whether you're a candidate for CMI implantation.



CMI sutured to medial meniscus at time 0



CMI in medial meniscus at 11 years

Rehabilitation after CMI Implantation

As with any surgery, rehabilitation is an important part of the process. Strict adherence to the suggested rehabilitation guidelines is critical to the long-term success of the surgical procedure. For more information about what to expect after CMI implantation, please review the CMI Rehabilitation Guidelines brochure from Ivy Sports Medicine.

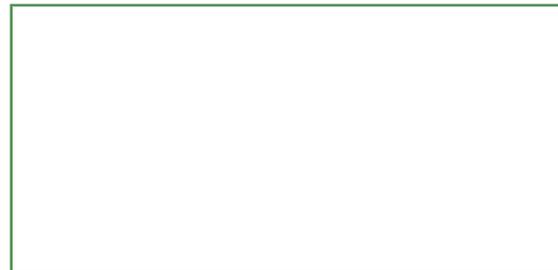
¹ Cicuttini FM, Forbes A, et al., J Rheumatol. 2002 Sep;29(9):1954-6.

² Mills PM, Wang Y, et al., Osteoarthritis Cartilage. 2008 Dec;16(12):1526-31. Epub 2008 Jun 2.

³ Rodkey WG, DeHaven KE, et al., J Bone Joint Surg Am. 2008 Jul;90(7):1413-26.

⁴ Zaffagnini S, Marcheggiani Muccioli GM, et al., Am J Sports Med. 2011 May;39(5):977-85. Epub 2011 Feb 4.

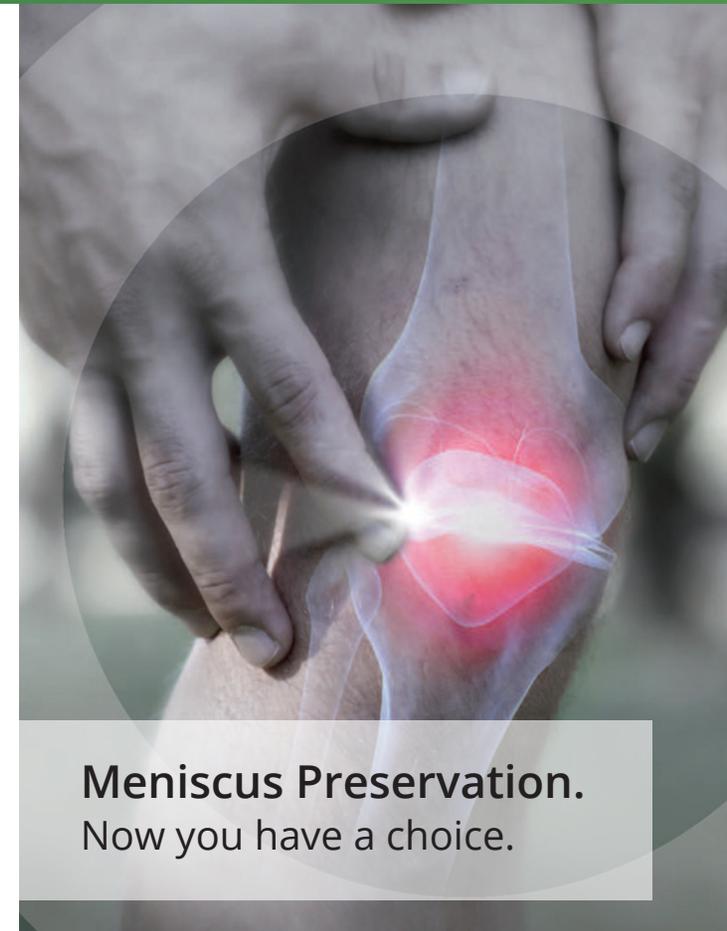
⁵ Monllau JC, Gelber PE, et al., Arthroscopy. 2011 Jul;27(7):933-43. Epub 2011 May 31.



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Collagen Meniscus Implant (CMI®)



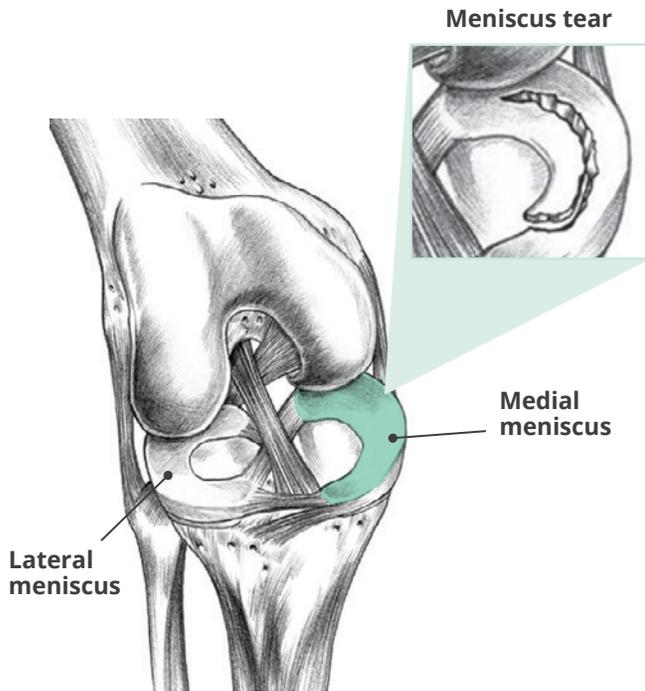
Meniscus Preservation.
Now you have a choice.

Patient Guide

 **Ivy Sports Medicine**

The Knee Joint

The knee joint is one of the largest and most complex joints in the body. The thigh bone (femur) and shin bone (tibia) connect at the knee joint and are held together by muscle tissue and ligaments which help stabilize your knee. During activity, your knee can experience forward, backward and twisting movements, as well as heavy loading on the underlying (articular) cartilage within the joint. To help protect the underlying cartilage during activity, your body has two crescent-shaped disks between the femur and tibia called the menisci. The menisci help distribute the load on the articular cartilage, act as a shock absorber and help lubricate and nourish the knee joint.



Meniscal Injury and Treatment Options

Sometimes during sporting activities or exercise patients might fall, twist or land in an unbalanced position which can cause one of the menisci to become damaged. When this happens, patients may experience a sharp pain in the knee joint, a feeling of the knee slipping out of place or hear a clicking sound. Each year in the United States, there are *more than one million surgical procedures* involving one of the menisci and are typically treated with a minimally-invasive approach. Based on severity of the injury and size of the tear, the surgeon may elect to perform one of the following procedures:

- **Meniscectomy** – resect or remove the damaged portion of the meniscus (most common)
- **Meniscus Repair** – repair the tear in the meniscus using sutures and small implants (less common)
- **Meniscus Transplant** – remove a majority of the meniscus and replaced with tissue from a donor source (less common)

In recent years, there has been a shift in the medical community to try to “preserve” the meniscus to prevent degenerative changes to the articular cartilage.¹ Once a portion of the meniscus is removed, the articular cartilage can experience excessive stress which may lead to arthritic changes and the onset of osteoarthritis (OA).² Due to the degenerative nature of OA, patients may experience increased pain and reduced function. If the pain is too severe, patients become candidates for an artificial knee replacement.

Meniscus Preservation with the CMI

The *Collagen Meniscus Implant (CMI)* is a biocompatible scaffold that can be used to reinforce and repair a meniscus defect following partial meniscectomy or for irreparable meniscus tears. The implant has the general shape of the human meniscus and is trimmed by the surgeon to match the size of the meniscal defect. The implant is inserted via a minimally-invasive procedure and sutured in place to the native meniscus.

