



# **CARTILAGE RESTORATION**

Medical advances have revolutionized the options now available to patients with joint cartilage damage. Surgically repair, regeneration, or replaced cartilage can allow:

- Pain relief
- Delay the onset of arthritis
- Return patients to an active lifestyle
- Slow the progression of cartilage damage
- Delay the need for joint replacement

The large joints in the foot and ankle are separated by a covering of smooth white tissue called cartilage. This covering is what allows the bones to glide easily over each other, makes it easier to move, and prolongs the longevity of the joint. When cartilage is damaged by normal wear and tear or injury, function is compromised by pain with movement.

Cartilage restoration focuses on relieving this pain through several minimally-invasive and arthroscopic techniques:

## **Arthroscopic Surgery**

Pieces of torn and damaged cartilage and tissue are removed or repaired in a procedure called "debridement."

#### Microfracture

Small puncture holes are drilled in the bone surface where cartilage has been lost to trigger the body's formation of a new cartilage covering.

# **Osteochrondial Transfer**

Used to repair smaller areas of cartilage defect. Portions of healthy cartilage are removed from a non-weight bearing area of the patient's own body and transplanted to the damaged area of the joint.

# Autologous Chondrocyte Implantation (ACI)

An innovative technique that creates new cartilage in an injured areas by utilizing healthy cartilage cells harvested from the patient's joint in a primary arthroscopic procedure. These healthy cartilage cells are then grown in a laboratory setting for 4-6 weeks and result in additional new cartilage that can then be used to repair damaged areas in a secondary procedure with a minimally invasive surgical technique.

## **Meniscal and Osteochondrial Allografts**

For larger areas of meniscal or articular cartilage loss(>1cm2), donated cartilage or menisci can be implanted to re-establish the joint surface and help return patients to an active lifestyle.