

WHAT IS

A 'CARTILAGE' TEAR OF THE KNEE?

The phrase 'I've torn my cartilage' is often used after injuring the knee joint. But what does it actually mean?

The knee joint is formed by three bones; the lower end of the thigh bone, top of the shin bone and knee cap. All these bones are covered in a smooth gristle, similar to the lining you would see on the end of a chicken bone, whilst carving Sunday lunch. This allows the bones to move with minimal friction against each other.

The knee is stabilised by four main ligaments and two large muscle groups. The two ligaments located on either side of the knee are called the 'collateral' ligaments. The remaining two ligaments called the 'cruciate' ligaments are located in the centre of the knee. The muscle groups situated around the back (hamstrings) and front (quadriceps) of the thigh provide dynamic stability.

The cartilages (often referred to as 'meniscii') are essentially shock absorbers, which sit between the thigh and shin bones, helping to reduce damage to the gristle. They are made of tough fibrous tissue with a poor blood supply and consequently, have little potential to heal (see fig 1).

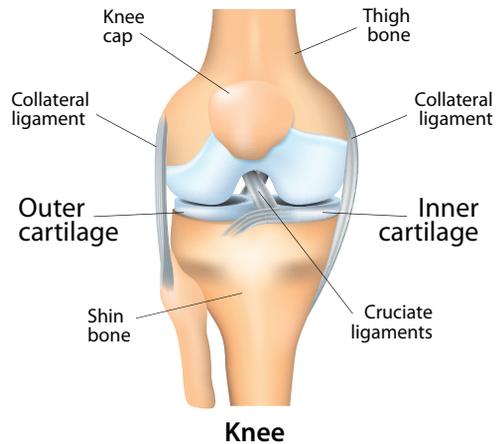
How do cartilage tears occur?

It is a myth that tears only occur whilst playing sport. Innocuous tasks such as crouching awkwardly whilst gardening, exuberant dancing or any activity that causes the knee to twist unnaturally putting excessive stresses on the cartilages, can lead to a tear.

What symptoms are expected?

Soon after the injury, pain and swelling are common. As the swelling improves, pain tends to localise to either the inner or outer side of the knee, depending on which cartilage is

FIG 1, KNEE ANATOMY



damaged. Occasionally, large tears can cause a catching/clicking sensation inside the knee.

What treatment options are available?

With little potential to heal by itself, if left alone, symptoms are likely to fluctuate, but never fully resolve. Therefore operative intervention is usually recommended to remove the torn piece of cartilage. This procedure is carried out by keyhole surgery as a day case (see fig 2).

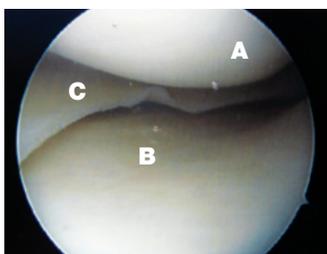
After surgery what happens?

The majority of patients leave hospital without the need for crutches. Physiotherapy exercises are encouraged and driving is allowed approximately one week later. Full recovery occurs in 4 – 6 weeks.

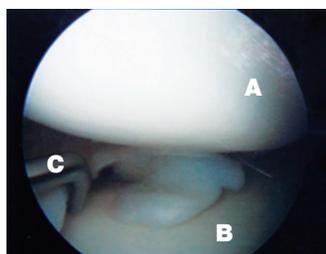
This procedure is carried out by **Mr David Simpson** at the Nuffield Health hospital, Wolverhampton.

FIG 2, ACTUAL IMAGES FROM INSIDE THE KNEE

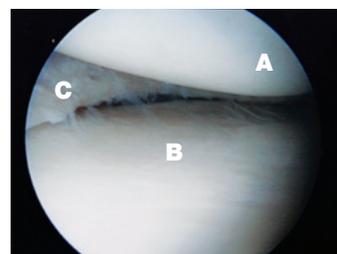
A: End of thigh bone, B: Top of shin bone, C: Cartilage



Normal cartilage



Torn cartilage



After Operation