

## MY OSTEO-ARTHRITIC KNEE

I have had a personal interest in the management of osteoarthritic knees that dates back to the mid 1980s, when I dislocated my knee playing hockey.

After the surgery and a long period of immobilisation, I was told by my surgeon that I would never be able to run or play sport again, and that my-then 26-year-old knee would quickly succumb to arthritis. The first part of the surgeon's advice proved to be way off the mark, as I managed to get back to running-based sport. The second piece of advice was, however, spot on. My left knee has gradually deteriorated over the years, becoming more painful and less functional as regards running, twisting and turning. I'm not surprised at this, as it is well documented that a severe joint injury increases the risk of developing osteoarthritic joint surface changes. Despite this,



Knee osteoarthritis without unloader bracing. The circled area shows bone-on-bone contact



The Ossur Unloader brace uses a three-point leverage system to realign the knee



Knee osteoarthritis with unloader bracing. The circled area shows joint space opening

I have maintained an optimistic and positive approach to the management of my knee, because there is a large body of evidence that supports the proactive management of so-called 'worn-out' joints.

It turns out that building strength and exposing arthritic joints to good functional loads - such as stepping, squatting and lunging - reduces pain and improves function. However, this approach can be difficult to implement because of a 'Catch 22' scenario; the exercises and activities that have the potential to reduce pain and improve function can be curtailed by the very pain that they are supposed to reduce. Physio-therapists can help patients get

around this by customising and tweaking specific exercises. However, there is another and frequently under-utilised strategy. This is the use of an unloader knee brace. Unloaders are lightweight sports braces that reduce pain by altering the direction of force transmission through the knee. There is a saying in physio and sport injury rehab circles that "pain ruins exercise". I subscribe wholeheartedly to this.

Reducing or even eliminating knee pain with an unloader brace can be a crucial step in being able to expose the knee to exercise and activity loads that have the potential for long-term pain control and functional preservation.