

# NON-SURGICAL TREATMENT OF DEGENERATIVE ARTHRITIS OF THE KNEE

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The basic problem is that the articular cartilage of your knee has worn away. In adults, articular cartilage has no blood supply and for all practical purposes no healing ability; in other words articular cartilage does not regenerate. At present, notwithstanding claims to the contrary, there is no scientific proof of any medication or diet that restores damaged cartilage. Some success has been reported with transplantation of cartilage, either from somewhere else in the joint or after cultivating the patient's own cartilage in a laboratory. These procedures are basically indicated for small localized lesions, usually following an injury.

Typically a worn knee causes discomfort and pain with weight-bearing activities such as walking or running. Usually little or no discomfort is experienced with non-weight-bearing activities such as cycling and swimming.

## SUGGESTED TREATMENT

### DECREASE THE LOAD

- Restrict weight-bearing activities such as walking, climbing stairs and running. If you have to do these activities, try to have some rest days in between these types of activities.
- Do not carry heavy loads, i.e. shopping bags etc.
- Use a walking-stick or cane in the hand opposite to the painful knee. By using a walking-stick, you will decrease the load on the affected knee by approximately 40 %.
- Weight-reduction will also have a beneficial effect.
- Concentrate on non-weight-bearing exercises, such as cycling, swimming and circuit training in the gym.
- In certain situations, especially with a knock knee, arch supports and a wedge fitted to the heel of your shoe might help.
- Use soft heeled shoes, such as running shoes, for walking.
- A knee guard or knee sleeve may be of symptomatic value. It does however not decrease the load on the knee and therefore a simple sleeve should be as effective as an expensive brace.

### MEDICATION

As mentioned earlier, there is no scientific proof that any medication or diet is of value in restoring articular cartilage. Medication is however very effective for symptomatic relief.

#### Chondroitin sulphate

Claims have been made that these medications can

restore the articular cartilage; there is no scientific proof for this. They do however seem to relieve symptoms, probably as a result of their anti-inflammatory properties. It is safe to use.

#### Hyaluronic acid, (e.g. Synvisc, Hyalogen & Orthovisc)

It consists of a course of three intraarticular injections with weekly intervals. Once again, it does have anti-inflammatory effects and can relieve pain, but it definitely does not restore the joint surface. It is effective to a degree in 60% of patients for approximately 6 months. Patients over 65 years of age and those with advanced arthritis are less likely to benefit.

#### NSAIDS

Non-steroidal anti-inflammatory drugs. These drugs are very effective for pain relief and are on the whole relatively safe, but they can cause stomach ulcers, a bleeding tendency and kidney failure. Recently a new generation of these drugs, the Cox 2 inhibitors, have been released. They have fewer side effects, but are unfortunately more expensive. The NSAIDS are relatively safe even if taken regularly, but we would recommend intermittent use. It is not necessary to take a course. Our suggestion would be to take them as necessary; they are usually effective within 2 hours. If you know when you are going to be active, take some the day before the activity, some on the day of the activity and then, depending on the symptoms, for another day or two thereafter.

- Older cheaper drugs: effective, but with more side effects. Ibuprofen: Brufen, Enza. Diclofenac: Voltaren, Panamor, Cataflam. Piroxicam: Brexecam, Feldene.
- New drugs: expensive, effective with less side effects. Meloxicam: Mobic, Coxflam. Celecoxib: Celebrex. Lumiracoxib: Prexige.

#### Analgesics

If an NSAID alone is not effective, combining it with a light analgesic often potentiates the effect of both the NSAIDS and the analgesic: Paracetamol: Panado, Dolorol, etc.

#### Topical treatment

Application of heat or cold may also be effective in relieving symptoms. It is however important that when either heat or cold are used, it should not be used excessively, as both excessive heat and cold can cause burn wounds which will definitely aggravate and not improve the situation. Topical application of medications, for example Voltaren gel, Reparil gel, Indocid gel, or Trans Act plasters may also be of value.