

OSTEOARTHRITIS

What is osteoarthritis?

Articular cartilage is the smooth surface lining found in all joints. It is remarkably similar to the layer of teflon on a non stick frying pan. It is approximately 2 to 3mm thick, just like a layer of teflon. Articular cartilage can be damaged by injury or by wear and tear and takes on an appearance not unlike the surface of an old teflon frying pan. This wear and tear process occurs in all joints. When it becomes severe it is called osteoarthritis.

The body does not have the ability to regrow articular cartilage. In the same way that we are unable to regrow new brain cells or liver cells, once articular cartilage is damaged it cannot regenerate. The body can repair defects in the articular cartilage with a substitute (fibrocartilage), but it does not function as well as the normal coating.

Who gets osteoarthritis?

- Osteoarthritis often starts in middle age.
- One third of people over the age of sixty have osteoarthritis.

What are the symptoms of osteoarthritis?

- Some people experience severe pain and stiffness but for many people symptoms are mild and cause only temporary or occasional flare-ups. The pain may be an aching pain at rest but usually it is brought on by increased activity or minor injury.
- There may be sharp catching pain from the roughened joint surfaces.
- Often osteoarthritis is accompanied by swelling.

What causes it?

a) Genetics

There is a strong genetic component to osteoarthritis. Some people inherit joints which wear out earlier than others.

b) Injury

“Post traumatic osteoarthritis” is very common. It occurs as a result of repeated minor injuries or a single major injury.

c) Obesity

Obesity causes osteoarthritis and being overweight can contribute to rapid degeneration of the joint.

d) A combination of these factors

The cause is often the result of several factors operating together.

How do we treat osteoarthritis?

There is a lot that can be done to reduce the symptoms of osteoarthritis:

1. Medication

- Several different types of medication can be used to control the pain of osteoarthritis.
- Drugs to treat inflammation and pain include:
 - Panadol (this is the safest and best medication to start with) or Panadeine
 - Non-steroidal anti-inflammatory drugs (NSAIDS) such as Nurofen, Naprosyn, Celebrex or Mobic

2. Weight loss

- Keeping your body weight within the normal range is essential in controlling the symptoms of osteoarthritis.
- All forms of treatment will fail if you remain significantly overweight and the osteoarthritis can progress rapidly.
- The key to weight loss is maintaining a proper balanced diet, in conjunction with regular exercise.

3. Low impact exercise

- Low impact exercise is a vital part of managing osteoarthritis. Exercise will:
 - decrease pain
 - increase strength in the supporting muscles of the leg
 - maintain flexibility of the joint

The general principle with osteoarthritis is “use it or lose it”

Exercise can be very difficult when the joint is painful. For this reason you may need to look at several different forms of exercise to find one that is suitable for you. The best low impact exercises are:-

Walking - Swimming - Cycling

There are many exercise programs available in the community for people with osteoarthritis. Advice on classes, programs, books and videos are available for the Arthritis Foundation.

4. Injections

- Cortisone– cortisone is a strong anti-inflammatory.
- Synvisc– a type of treatment called a visco supplement. It lubricates and cushions your knee joint and relieves pain which can allow you to move more freely for up to six months or more.
- PRP – Platelet Rich Plasma – can promote healing and reduce inflammation.

5. Bracing, ambulatory aids and corrective footwear

- Bracing may help by providing some stability to the joint and also provide warmth in the colder months. The simplest braces are made of neoprene and are available from the chemist. More supportive braces can be obtained from an orthotist.
- For severe symptoms ambulatory aids such as a walking stick or frame may be beneficial.
- Corrective footwear may help where there are abnormalities such as a flat foot or bowleg. A podiatrist can help with the fitting of orthotics and custom footwear.

6. Physiotherapy

The physiotherapist can teach you exercises which will help to strengthen the leg muscles. By strengthening the muscles less force is transmitted to the joint and this will help control symptoms.

7. Hydrotherapy and pool walking

Hydrotherapy has the advantage that it is non weight bearing and therefore less likely to cause pain. For severe arthritic symptoms hydrotherapy may be the only form of exercise which is feasible. Regular pool walking is highly recommended and one of the best treatments during a 'flare up' of pain.

8. Natural therapies

- Glucosamine

Clinical trials have failed to show any significant impact on arthritic symptoms.

- Fish oil

Fish oil containing Omega 3 fatty acids may have an anti-inflammatory action. Eating oily fish regularly has more health benefits than fish oil supplements.

- Tumeric

Contains curcumin which has an anti-inflammatory effect.

9. Stem Cells

There is no reliable scientific evidence to support stem cell injections for arthritis at this point in time.

Further information:- (www.arthritisaustralia.com.au)

DAVID COLVIN

MBBS FRACS

ORTHOPAEDIC SURGEON

ABN 83 174 984 438

Telephone: 08 9489 8788

Fax: 08 9489 8787