

## Osteoarthritis is:

- the most common joint disease;
- the main source of difficulty in mobility (locomotor disability);
- a disease that is not limited to cartilage damage, but extends to all components of the joint (synovium and bone).

### Frequency that increases with age



However, this frequency is not the same according to the definition (anatomical, radiological or symptomatic) given to the disease.

More simply, radiology identifies half of anatomical lesions (lesions visible at autopsy) and only half of radiological trigger symptoms. Thus only 25% of osteoarthritis lesions are painful and incite the patient to see a doctor.

Example: osteoarthritis of the spine is most common in the 65-75 year age group, but it manifests itself very little by pain.

This frequency differs depending on the site.

Example: in the 65-75 year age group, the frequency of osteoarthritis on x-rays is 75% for the spine, 60% for the fingers, 30% for the knee and 10% for the hip.

This frequency differs according to gender. It is higher in women after the age of 50.

### Risk factors dominated by excess weight and trauma

Excess weight is the main risk factor for osteoarthritis. This risk factor is not limited to the joints that bear the weight of the body (knee, hip), but also for non weight-bearing joints such as the fingers.

Trauma (and strain injuries) associated with work or sports activities are involved in a large number of osteoarthritis cases (*see box*).

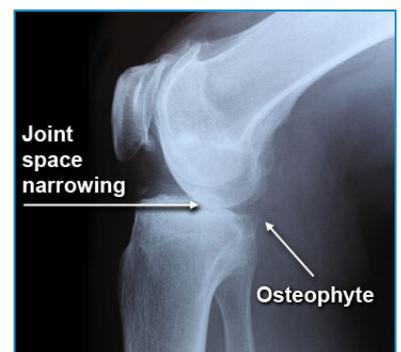
Other risk factors (age, sex, heredity) have the characteristic of not being able to be changed. They cannot therefore be subjected to preventive measures.

### Two symptoms and three radiological images

Osteoarthritis is characterised by pain and stiffness responsible for a disability of varying degrees of severity.

**The diagnosis of osteoarthritis suggested by these two symptoms is confirmed by x-rays when they show:**

- a decrease in height of the space between the two articular surfaces (joint space narrowing);
- "holes" in the part of the bone beneath the cartilage (geodes);
- bony spurs at the junction of the bone and cartilage (osteophytes).



### An unpredictable evolution

Evolution may be rapid, justifying the introduction of a prosthesis within a short space of time. In contrast, it can be slow, without any real disability for 10 or 20 years.

The evolution is characterised by acute episodes of painful flare ups that require resting the joint and an anti-inflammatory treatment early on to avoid sudden worsening of osteoarthritic lesions.

## A 4-step therapy approach

**Tips for articular economy** are part of patient education. Avoid carrying heavy loads, walking on uneven ground and any physical activity that may trigger pain sums up the rules to be observed.

### Two "non-drug" measures are prominent:

- reducing any excess weight
- and a aerobic physical exercise programme without breathlessness (*see box*).

Other measures are represented by orthotics (insoles, knee supports, walking sticks) and learning joint mobilisation and muscle-strengthening exercises (from a physiotherapist).

### Medication falls within 4 categories:

- symptomatic slow-acting drugs (SYSADOAs)
- analgesics (with paracetamol as the leading drug);
- non-steroidal anti-inflammatory drugs
- intra-articular injections (cortisone during flare ups, hyaluronic acid outside of flare ups).

### Surgery (knee or hip replacement) is considered when the following 2 conditions have been met:

- drugs are no longer sufficient for relieving pain;
- the osteoarthritic lesions are "well advanced" on x-rays.

## SPORT AND OSTEOARTHRITIS

- **Sport promotes the onset of osteoarthritis when there is a high risk of trauma or microtrauma.**  
On the other hand, regular physical exercise is highly recommended to osteoarthritis patients.
- **The role of sports injuries in the appearance of osteoarthritic lesions leaves no doubt.**  
Sports such as football or rugby expose the knee to ligament and meniscal injuries known to promote osteoarthritis.  
The same is true for sprains, fractures and repetitive strain injuries of the ankle.
- **Aerobic physical activity (without breathlessness) is one of the essential steps to treating osteoarthritis.**  
It maintains physical fitness and improves the quality of life of osteoarthritis patients.  
It is the patient who chooses the type of exercise they wish to do, subject to their doctor confirming they have the physical ability to do so.  
In practice, they have the choice between:
  - 30 minutes of brisk walking 3 times a week,
  - or regular cycling or swimming.The only activity that is not recommended is one that triggers pain in their arthritic joint.