

# Osteoarthritis hip and knee



## Patient Information

### What is osteoarthritis (OA)?

Osteoarthritis is the most common form of joint arthritis. The cartilage covering the joints gradually becomes worn and damaged. Bony growths may appear and the capsule surrounding the joint becomes thicker. Some ligaments may become weaker.

### Causes of OA

OA is more common in **older persons** (over 45 years) but can affect younger people too. **Obesity** is a major factor due to increased stress through the joints. **Previous injury** or other joint disease (fractures, rheumatoid arthritis, joint laxity) can contribute. **Genetic factors** can play a part although the reason for this is unclear.

### Living with OA

Osteoarthritis symptoms may present over a long period of time. They don't necessarily get worse and by following the right advice you can lead a healthy, active life. X-ray changes are not a good indicator of pain or disability.

### NICE guidelines for OA

The National Institute for Health and Care Excellence produced guidelines for managing OA in 2008. These were updated in 2014. They recommend the following:

- Weight management
- Reduce joint stress
- Pain relief
- Regular exercise
- Activity pacing

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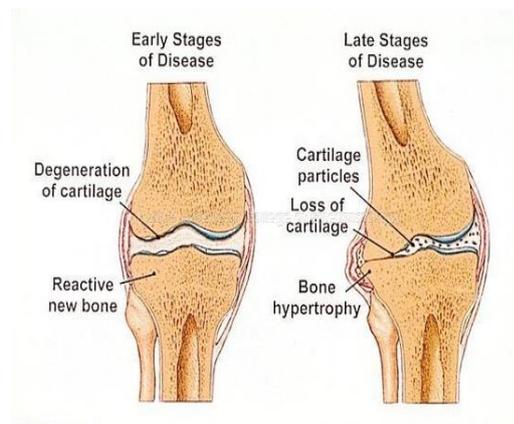
## Symptoms of OA

Symptoms may include pain, stiffness, grating/grinding on movement, swelling of the joint. For some symptoms may be mild and intermittent. For others symptoms can be more severe and affect function. The pictures below show some of the common joint changes that occur in osteoarthritis.

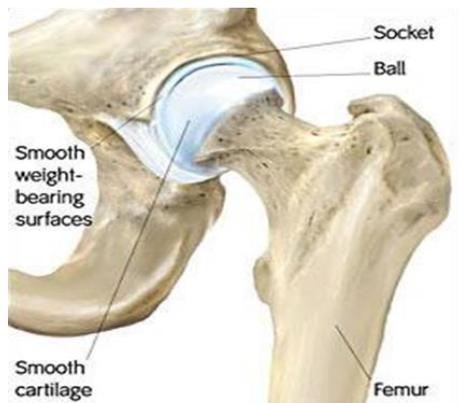
### Normal knee joint



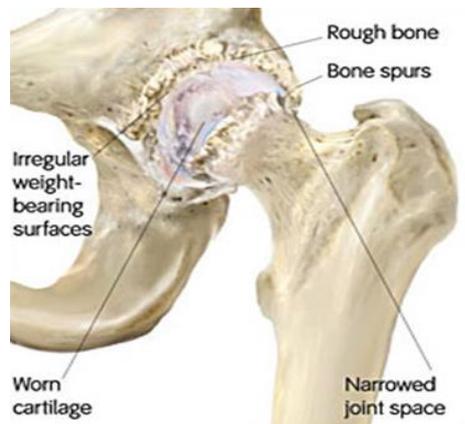
### Osteoarthritic knee joint



### Normal hip joint



### Osteoarthritic hip joint



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## Weight management

- Body mass index (BMI) is the common way to calculate if you are a healthy weight.
- There are tools available on the internet that calculate both in metric and imperial
- <http://www.nhs.uk/Tools/Pages/Healthyweightcalculator.aspx>
- BMI results;
  - < 18.5 underweight
  - 18.5-24.9 ideal weight
  - 25-30 overweight
  - >30 obese
- If your BMI is high, speak to your GP about a weight loss programme suitable for you.
- Eat a healthy balanced diet as outlined below

## Healthy balanced diet

- Base meals on starchy foods such as potatoes, bread, rice and pasta, choosing wholegrain where possible.
- Eat plenty of fibre-rich foods – such as oats, beans, peas, lentils, grains, seeds, fruit and vegetables, as well as wholegrain bread, brown rice and pasta.
- Eat at least five portions of fruit and vegetables a day in place of foods higher in fat and calories.
- Avoid eating too much processed food, sugary drinks and foods high in unhealthy fats
- Eat a healthy and filling breakfast.
- Watch the portion size of meals and snacks, and how often you are eating.
- Avoid taking in too many calories in the form of alcohol.
- See the useful websites on the back of this leaflet for more information

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## Reduce joint stress

- Maintain a normal BMI
- Try shock absorbing footwear/insoles
- Walking aids can reduce the weight going through your joints
- Low impact exercises e.g. exercise in water, cycling/static bike, cross trainer, Pilates, Tai Chi, yoga
- Try other aids e.g. kneeling pads, helping hand

## Pain relief

- Talk to your GP if you feel you need some medication to help your pain.
- **Paracetamol** is the most commonly used medication. Take as directed and never take more than the dose advised by your GP.
- **Topical NSAIDs** may be prescribed for knee OA usually in the form of a gel.
- Less commonly you may be prescribed **non-steroidal anti-inflammatory drugs** (NSAIDs) e.g. ibuprofen or diclofenac or opioids e.g. dihydrocodeine or tramadol
- **Topical capsaicin** can be used for OA knees
- In some cases a **steroid injection** may be helpful for the relief of pain.

## Other ways to ease pain

- Your GP or Physiotherapist will be able to discuss which of these interventions may help you.
- **Heat** – using gentle heat such as a wheat bag for 10 minutes
- **Cold** – using crushed ice/bag of frozen peas wrapped in a towel for 10 minutes. Don't apply ice directly to the skin as there is the risk of a burn
- **TENS** – a small machine that can help to block out pain signals
- **Walking aids** –such as a stick or walking poles to give support when walking
- **Relaxation**
- **Aids to daily living** - Make daily activities easier and reduce stress on joints e.g. chair/bed raises, sock aid, toilet seat raise, bath aids, grab rails

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### Regular Exercise

- There are 4 main types of exercises and using a combination of these will help to reduce your pain in most cases.
  - Strengthening – to build the muscles and improve support to the joint
  - Stretching – to maintain muscle length
  - Range of movement– to relieve stiffness and maintain flexibility of the joint
  - Cardiovascular – to maintain/improve fitness e.g. exercise bike, walking
- Aim towards 30 minutes a day, 5 days a week
- Try the exercises found on page 8-9 of this leaflet

### Posture and muscle control

- Muscles work most efficiently when you have good posture
- Maintaining good posture will reduce the stress through your joints and ligaments helping to reduce pain and fatigue
- Try to maintain a good upright posture in sitting and standing avoiding hunching your shoulders.
- Try to weight bear equally through your legs to avoid putting extra pressure on one side.

### Activity pacing

- To avoid provoking/increasing your pain, answer the following questions before completing activities;
  - **Prioritising** – Which tasks are most important in your day?
  - **Planning** – Could you do a task differently or ask for help?
  - **Pacing** – Can you break the task into small stages?
- Make a plan, prioritise what has to be done on a daily basis (a pain diary may help initially)
- Start activities with realistic low baselines, then build up gradually
- Take regular rests between activities but avoid prolonged periods of rest
- Change position frequently whilst performing activities
- Do a small amount often rather than doing everything at once
- Modify your activity level if you get a flare up
- Research has shown that increasing activity/exercise reduces pain in the long term

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## Surgery

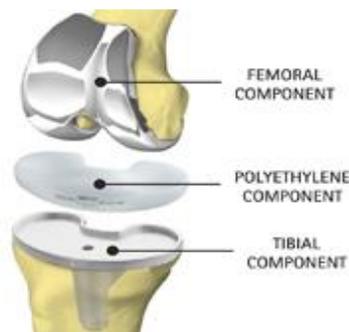
Referral for surgery is normally considered only if:

- All core treatments (i.e. pain control, physiotherapy and OA exercise class) have been tried.
- Quality of life is adversely affected.
- Patient specific factors such as age, smoking, obesity, gender and co-morbidities should not stop referral for assessment.

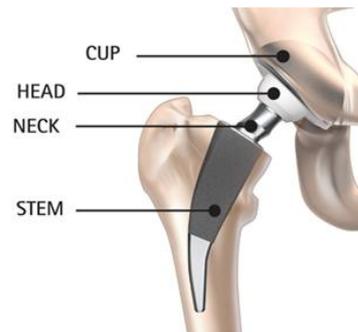
### Total joint replacement

- This replaces the damaged joint surfaces with a replacement joint, which is usually a combination of metal and plastic.
- Implants can be fixed to bone using cement or rely on bone growth onto the implant (uncemented)

### Total knee replacement



### Total hip replacement



Other (less common) types of surgery for OA:

- Arthroscopy – for locking of the knee, impingement of the hip
- Osteotomy – to realign the bones
- Partial knee replacement (unicompartmental)

### Benefits of joint replacement surgery include;

- Improved movement of the joint, pain relief, improved joint alignment and stability. This should lead to improved function and a better quality of life.

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### Risks of joint replacement

- A blood clot in the calf (DVT) gives symptoms of calf pain, heat and swelling. If this happens you should seek urgent medical advice. Some patients are given a course of anticoagulant injections following surgery to help to prevent this.
- Other risks include infection, stiffness, loosening/failure, dislocation, leg length discrepancy, need for blood transfusion, damage to ligaments, nerve or blood vessels and fracture of the bone around the joint.

### Recovery following joint replacement surgery

- You will usually stay in hospital for between 2-4 days following surgery.
- You will normally see the physiotherapist as soon as possible after the operation to begin exercises and walking.
- You will be discharged home once the nurses are happy with the wound and the physiotherapists are happy with your joint movement and walking.
- You will usually have a walking aid such as crutches for the first few weeks.
- It will take at least 6 weeks to recover from the operation, often longer. Of course each patient is different and each will have a different experience.
- Your leg may be swollen and this can take at least 3 months to settle completely.
- There will be restrictions on driving and advice will be given on when you can return to work.
- You would normally have a follow up with a member of the Orthopaedic team around six weeks after your operation.

### Recovery from knee replacement

- You will need to work hard with exercises to regain the movement and muscle strength. This may be uncomfortable at first but it is vital to get the knee moving.
- Often you will be referred for further outpatient physiotherapy when you go home.
- Clicking is common due to the hard implant surfaces contacting each other.
- You will have a small area of numbness on the outer side of your knee.

### Recovery from hip replacement

- You will have exercises to do at home, but you do not usually need outpatient physiotherapy.
- You will need to be careful with certain movements such as twisting or bending too far and will need to avoid sleeping on your side for a few weeks.

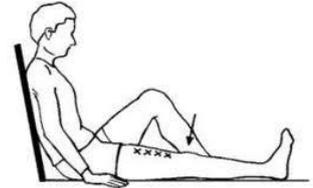
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**Exercises**

Your Physiotherapist can guide you to the suitable exercises for you. Although the exercises may feel hard to do at first they should not greatly aggravate your pain. If they do please seek advice from your Physiotherapist or GP.

**1) Static quadriceps**

Sitting with your leg straight, push the back of your knee into the bed/floor, hold for 5 seconds, then release. Repeat 10 – 20 times



**2) Inner range quadriceps**

Sitting with your knee over a rolled up towel, push the back of your knee into the towel and lift your foot off the bed/floor, hold for 5 seconds, then return your foot to the surface. Repeat 10 – 20 times.



**3) Straight leg lifts**

In lying, lift your straight leg up, hold for 5 seconds, then release. Repeat 10 times.



**4) Knee flexion**

In lying, bend your knee as far as you can, hold for 5 seconds, then straighten. Repeat 10 times.

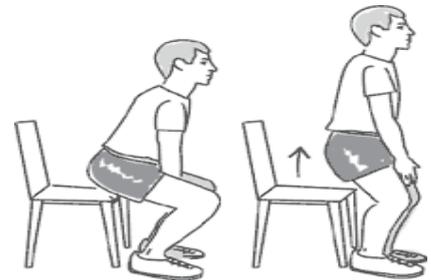


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**Exercises (continued)**

**5) Sit to stand**

Try not to push up with your hands if you can. Sit to stand slowly 10 times.



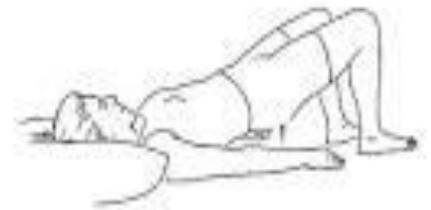
**6) Hip abduction lying**

Keeping your leg straight and your toes pointing to the ceiling take your leg out as far as you can manage. Repeat 10 times



**7) Bridging**

Lie on your back with your knees bent, try and lift your hips as high as you can. Hold 5 seconds. Repeat 5-10 times.



**Further information**

Below are the telephone numbers for the Community Outpatient Physiotherapy departments. Please call your local department for any further information/guidance;

- Chippenham - 01249 456451
- Devizes - 01380 732520
- Malmesbury - 01666 827583
- Melksham - 01225 701027
- Salisbury - 01722 336262 Ext 4425/4413
- Savernake - 01672 517310
- Trowbridge – 01225 711341
- Warminster – 01985 224716

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## Useful resources

- [www.nhs.uk/conditions/osteoarthritis](http://www.nhs.uk/conditions/osteoarthritis)
- [www.bdaweightwise.com](http://www.bdaweightwise.com)
- [www.nhs.uk/change4life](http://www.nhs.uk/change4life)
- [www.weightconcern.org.uk](http://www.weightconcern.org.uk)
- [www.arthritisresearchuk.org](http://www.arthritisresearchuk.org)
- **Arthritis Research UK** - Copeman House, St Mary's Court, St Mary's Gate, Chesterfield, Derbyshire, S41 7TD. Tel 0300 790 0400

## Safeguarding

Wiltshire Health and Care has a strong commitment to care that is safe, of a high quality and that upholds our patients' rights. All our patients have the right to live lives free from abuse or neglect and, where they are able, to make or be supported to make informed decisions and choices about their treatment, care and support. Where patients are not able to make their own decisions, Wiltshire Health and Care staff are committed to ensuring that treatment, care and support is undertaken in accordance with the person's best interests. In order to fulfil these commitments, Wiltshire Health and Care follow the Safeguarding principles and responsibilities laid out in Sections 42-46 of the Care Act (2014) and are informed by, and apply, the guiding principles and provisions of the Mental Capacity Act (2005).

If you or your carer have any concerns about abuse, neglect or your rights in relation to care provided by Wiltshire Health and Care or any other agency or individual, please raise this directly with any Wiltshire Health and Care staff or contact the Safeguarding Adults Team by telephone on: 0300 4560111.

## Wiltshire Health and Care Patient Advice and Liaison Service (PALS)

If you have any questions, or concerns, suggestions or compliments about our service, please speak to a member of staff.

This information sheet is available in other languages and formats. If you would like a copy, please contact us on 0300 1237797 and [PALS.wiltshirehealthandcare@nhs.net](mailto:PALS.wiltshirehealthandcare@nhs.net)

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