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Your Journey With Arthritis...Now Gets Easy



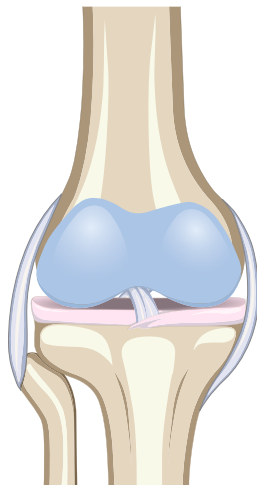
What is osteoarthritis?



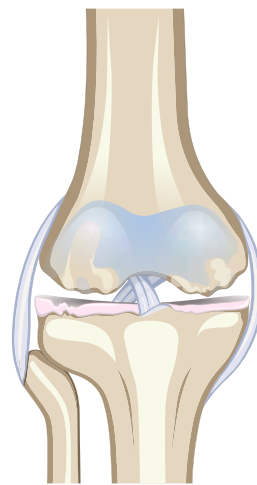


**My Knee hurts when I walk a bit more or climb stairs...
My doctor says I have osteoarthritis...
What is osteoarthritis?**

Osteoarthritis (OA) is the most common form of arthritis affecting millions of people the world over. Commonly known as ‘wear and tear’ arthritis, it is a leading cause of disability among the elderly individuals. The following image shows the difference between a normal joint and a joint affected by OA. This degenerative joint disease causes pain, swelling and reduced motion in the joints. It can occur in any joint, but most commonly affects the knees, hips, hands and spine.



Healthy knee joint

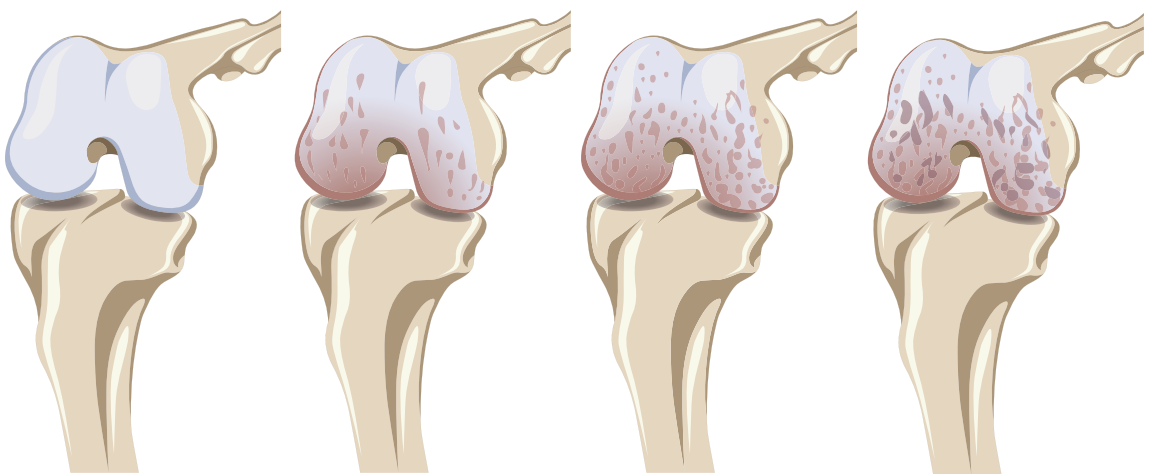


Osteoarthritic knee joint

What is osteoarthritis?

How does OA progress

OA progresses gradually and may worsen with time. The first change that occurs due to OA in your joint is the thinning of the **cartilage**, which is a slippery tissue that covers the ends of your bones and acts like a cushion and shock absorber. Normally, the smooth surface of the cartilage and the lubricating fluid inside the joints allow the joints to move freely. But with the progression of age, overuse and some degree of genetic tendency to develop OA, this cartilage starts to wear down as seen in the image below.

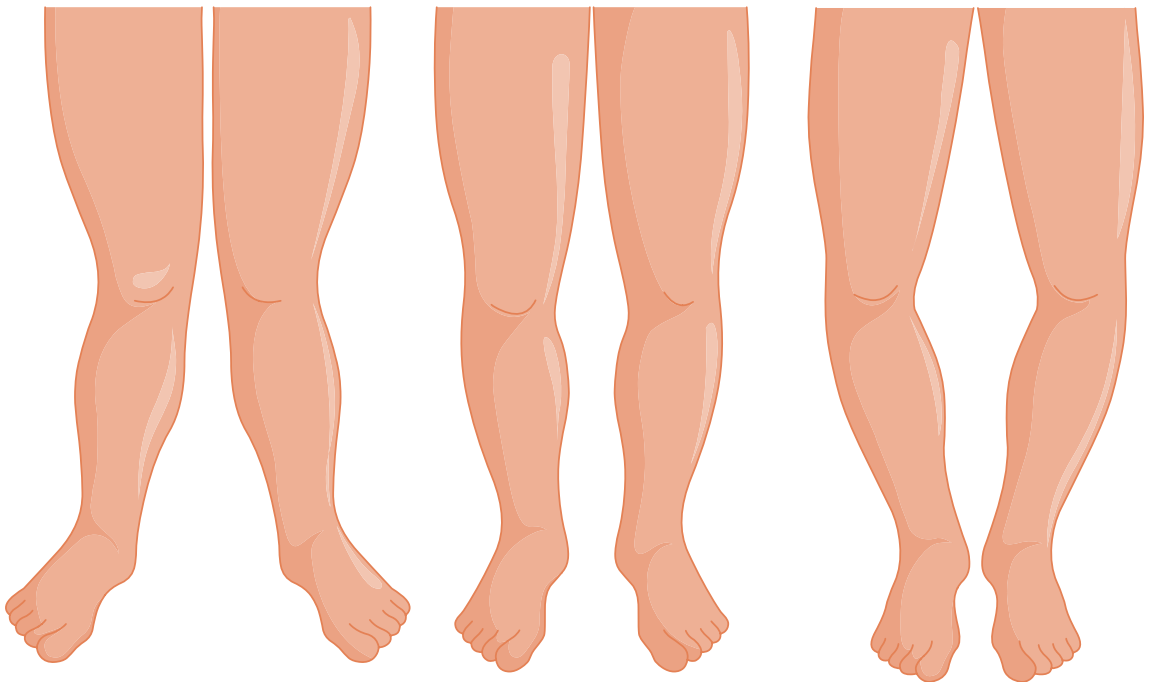


A knee joint affected by various stages of osteoarthritis, from a healthy joint (left) to a stage 3 (right) joint.

This type of destruction of cartilage allows the bones to rub against each other resulting in swelling of the joints and pain on movement. Over a period of time, the normal shape of the joint may alter and sharp bony spurs may form on the bone surface. Small bits of bone and cartilage may break away and float freely in the joint space. This further increases pain and finally results in restricted movement, if not impossible.

What happens if I don't take care of my knees now?

Because OA is a progressive disease, destruction of the cartilage increases exponentially if one doesn't take care of the affected knees. A stage will arise when the bones start rubbing against one another. This leads to a lot of pain, swelling and restricted joint mobility. With advancing disease, the cushion between the two bones (meniscus) will also get destroyed. Once the meniscus gets eroded, the knee will be deformed. Deformed knees, in turn, will lead to an alteration in the overall alignment of the leg. In case of destruction of inner cushion (medial meniscus), the knees will get twisted outwards resulting in a 'bow leg' deformity, or varus deformity. It is the most common deformity of the arthritic knee. However, when the outer cushion (lateral meniscus) gets eroded, the knee gets twisted inwards resulting in a 'knock knee' deformity, or valgus deformity.



Genu valgum

Normal

Genu varum

What is osteoarthritis?

Is OA slowing you down?

Living with OA

Although it surely is difficult to lead life with such a condition, coping with OA may become easier with minor changes in lifestyle and plenty of positive attitude. Following are some points to help one cope with OA:

- Ensure proper support and positioning of the neck and back while sitting and sleeping
- Adjust the height of furniture such as chairs and toilet seat to facilitate easy getting up
- Avoid frequent use of the affected joint, such as repeated bending
- Try and lose weight if overweight or obese; losing weight reduces pain and slows the progression of OA
- **Exercise diligently:** If you already have pain, avoid overusing the affected joint; 5-10 minutes of simple exercises every day is essential to maintain the flexibility of the joints and strengthen the muscles
- Consult a physiotherapist and learn suitable knee physiotherapy.
- Use arthritis-assist devices that will be of help in daily activities
- Keeping a pillow between the knees while sleeping helps in relieving pain



What sort of food should I have? Is there anything that I should avoid?

Although healthy eating is good for one and all, eating a well-balanced diet is of essential importance for people with OA. Healthy food habits help in maintaining an ideal body weight, building strong cartilage and reducing inflammation.

Here are some essential points to remember:

- **Cut extra calories:** Reduce portion size and cut down the intake of sugar-laden foods and drinks
- **Include more antioxidant-rich fruits and vegetables:** Apples, shallots, strawberries, onions, etc. Antioxidants prevent cell damage and reduce inflammation.
- **Consume more omega-3 fatty acids:** Foods rich in omega-3 fatty acids relieve joint pain by reducing inflammation and morning stiffness. Examples: oily fish (sardines and salmons), fish oil supplements, flax seed and flax seed oil, canola oil and walnuts.
- **Vitamin C:** Helps in building collagen and connective tissue. Try to include as much vitamin-C-rich foods as possible. Examples: citrus fruits, red peppers, strawberries, broccoli and cabbages.
- **Olive oil:** Olive oil has oleocanthal that reduces inflammation
- **Avoid high temperatures while cooking:** Foods cooked in high temperatures contain a higher amount of advanced glycation end products (AGEs). These cause inflammation and are associated with arthritis, heart diseases and diabetes. One can reduce AGEs by cutting back on grilled, fried, broiled or microwaved meats and processed foods.



What is osteoarthritis?

I have knee pain, what precautions should I take? Do I have to avoid exercises?

- **Get moving!** Being inactive for fear of pain will only make matters worse.
 - **Exercise regularly:** Staying active lessens the stiffness and pain in the joints. Exercise increases blood flow, aiding in joint repair and weight loss.
 - **Muscle-strengthening exercises and stretching** relieve joint stiffness and protect the cartilage from further wear and tear.
 - **Low-impact exercises** such as walking, swimming, cycling and water aerobics **help in** easing joint stiffness and pain.
 - **AVOID** high-impact exercises such as running, jumping and kickboxing, which have a jarring effect on the knee.
 - **AVOID** lunges and deep squats that put additional stress on the knees.
 - **Consultation** with the doctor is compulsory before beginning any exercise
- **Be cautious, don't risk falling:** A fall may lead to further knee damage.
- **Consult a doctor:** A **right diagnosis and appropriate treatment** prevents further damage.



How can I care for my joints at home?

Once joint damage sets in a person with OA, it cannot be reversed. However, simple steps may be taken to reduce the pain and slow down the damage. The following tips may be helpful:

- **Follow RICE:** One can reduce discomfort by:
 - **Resting** the knee, applying **Ice** to reduce swelling, applying a **Compressive bandage** and keeping the knee **Elevated**
- **Apply cold and hot packs:** Applying a cold pack for 15-20 minutes 3-4 times a helps in reducing the swelling and numbing the pain. One may use a bag of ice, or a pack of frozen peas works just as well. Following this, heat may be applied using a warm bath, warm towel or a heating pad for 15-20 minutes 3-4 times a day
- **Pace activities** throughout the day. Avoid too much physical work at a time
- **Lose weight:** Losing weight **lessens load** on the knees. Even a slight weight loss makes a difference
- **Physiotherapy:**
 - Consult a physiotherapist
 - Do the suggested exercises diligently
 - Gradually increase the counts
 - Follow-up regularly
- **Use appropriate foot wear:** Cushioned insoles reduce the stress on the knees
- **Modifications to home or work place** may be planned to reduce avoidable strain
- Reduce load on knee by using **walking aids**, such as walking stick of appropriate height, crutches, knee splints and braces, that provide support and stability; remember that **braces are only supportive and not curative**
- **Reduce the risk of falling** by using proper lighting, hand rails for support while climbing stairs, sturdy ladder or steps while reaching for something placed at a height



What is osteoarthritis?

- **Medications and injections:**

- **Ask your doctor about over-the-counter pain relievers for flare-ups that you can take at home:** Over-the-counter (OTC) pain relievers include aspirin, paracetamol, ibuprofen, etc. Be sure to read the label and take them only as directed by your doctor. Taking pain killers for a long time and injections into the knee have their own complications
- **Remember OTC pain relievers are of little value, and their effect is short lived:** If you need to take them daily for months and years, it may be time to think of undergoing a knee replacement surgery. According to experts, medicines only help one to 'buy time'.



Don'ts in OA

- Avoid sandals and shoes that have high heels or are too hard; instead, use shoes with low heels or those that lace up and provide proper support to the feet
- Avoid walking on steep slopes and very soft or uneven terrain
- Avoid using the stairs: Use the elevator where possible. If one has to use stairs:
 - Climb one stair at a time and take support of the hand rail
 - Always put the healthy foot forward
- Avoid carrying heavy objects: Carrying heavy objects places additional stress on the knees
- Do not fold the legs behind the chair; stretch your legs gently and frequently change their position
- Avoid standing continuously for long periods of time; instead, take a break after every hour
- Avoid putting pressure on the affected knee while getting up from a bed or chair. Instead, for getting up, forcefully push downwards with both the hands.
- According to Experts, avoid squatting, sitting on the floor or low chairs and sitting cross legged. One should choose chairs that have a high seat and elevated armrests.
- Avoid kneeling down: Many jobs that need kneeling down may be done using low chairs or stools
- Avoid using squat-type (Indian) toilets
- Avoid massaging the knee



Knee replacement surgery—a cause of stress?

Let's break some myths about OA!

Answer the following questions and check if you are right referring to the Answer Key given towards the end.

1. Eating oranges and grapefruit triggers OA pain.
 - A. True
 - B. False

2. What helps in soothing OA pain?
 - A. Wearing a copper bracelet
 - B. Taking rest
 - C. Listening to music
 - D. Dancing

3. OA pain occurs only in the knee or hip.
 - A. True
 - B. False

4. The best way to relieve OA pain is by applying
 - A. A hot pack
 - B. A cold pack
 - C. Both hot and cold packs
 - D. Neither a hot nor a cold pack

5. Once on painkillers for pain relief from OA, one has to take them for life.
 - A. No, not necessary
 - B. Yes, once on painkillers, always on painkillers

Answer Key

1. B: It is a myth that consuming citrus fruits triggers OA pain. On the contrary, citrus fruits are rich in vitamin C, which helps in reducing pain and slowing down the progression of OA.
2. C: Listening to music every day is known to relieve chronic pain such as in a patient with OA. Studies have shown that people who listen to music every day experience lesser pain, feel less depressed and more in charge of their lives than those who do not listen to music.
3. B: Although occurring more commonly in the joints of the hip, knee, fingers and spine, OA can develop in practically any joint where the cartilage has worn away.
4. C: Cold packs, such as frozen peas, help in reducing pain and inflammation in the joints, whereas application of heat helps in reducing stiffness. One has to experiment a bit to find out what works best for oneself. Studies have shown that both are effective in affording relief for OA patients.
5. A: Pain killers when taken continuously can have side effects such as bleeding ulcers in the stomach. These drugs are prescribed to relieve pain, inflammation and joint stiffness, so that the patient can continue to be active. Lesser pain and stiffness will enable the patient to exercise more regularly, contributing towards reduction in pain. Over time, one can cut back on the painkillers required to stay active.

What is osteoarthritis?

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