

## Osteoarthritis

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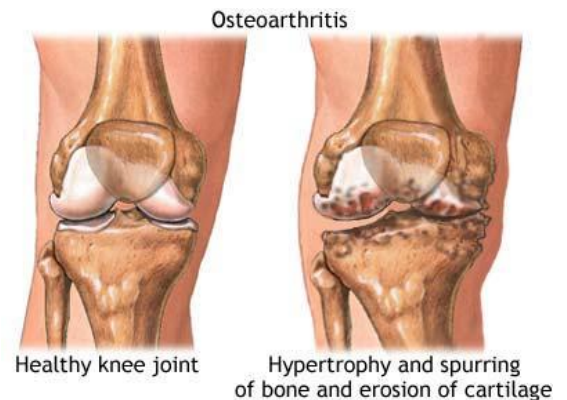
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### ***What is osteoarthritis?***

It is a condition where the pain occurs in the joints due to wear and tear in the cartilage. The structure between the two bones in a joint is called as the cartilage. Not all joints have cartilage.

### ***How do I know whether I am suffering from osteoarthritis?***

If you have very gradual onset of pain in the joints (usually in the knee joints) which increases on climbing stairs initially and later on walking on even plane surfaces you could be suffering from osteoarthritis.



Osteoarthritis can affect other joints as well. But knee joint involvement produces lots of disability. Hence, most of the patients consult doctors for osteoarthritis of knee joints. When osteoarthritis involves fingers of the hands it produces hard swelling (nodules) in the joints, but pain is less here. Here most of the patients are cosmetically concerned and they consult doctors for a swelling rather than pain.

We have described osteoarthritis of the knees and hips in the following discussion as it produce more disabilities than by any other joint which is affected by osteoarthritis.

### ***Why do I have pain in osteoarthritis?***

When the cartilage between the two bones in a joint undergoes wear and tear, alignment of the joint changes. This change in alignment produces tension on surrounding structures like muscles. Also, when cartilage becomes thinner underlying bone also get exposed to undue load which produces pain.

### ***What are the risk factors for development of osteoarthritis?***

Strongest risk factor for osteoarthritis of all joint sites is age. Women are more likely to have osteoarthritis than men and they may have more severe osteoarthritis as well. There is a definite increase in osteoarthritis in women around the time of menopause. Up to 65% osteoarthritis may occur on a genetic basis. Heritability may vary by sex and joint site. The role of obesity in osteoarthritis also may differ by joint site; while obesity is strongly associated with knee osteoarthritis, it does not appear to be as consistently associated with hip osteoarthritis. The effects of obesity in knee osteoarthritis may also be different in men and women.

***Are there any dietary factors that influence the incidence and progression of osteoarthritis of knees?***

Dietary intake of vitamin A, vitamin C and Vitamin D are associated with lower risk of progression of osteoarthritis of knees but have no effect up on the development of knee osteoarthritis.

***Is there any association between physical activity and Osteoarthritis?***

Recreational physical activity and sports participation in the absence of joint injury do not lead to osteoarthritis. Significant injury to the structures of a joint, particularly a structure within the joint can result in a significantly increased risk of a future osteoarthritis.

***Is there any occupation that is associated with osteoarthritis?***

Occupations requiring heavy physical labour have long been associated with osteoarthritis of the knee and hip.

Osteoarthritis of the knee has been associated with heavy physical labour, repetitive knee bending and squatting. Farmers have increased risk of osteoarthritis of hip, particularly with jobs requiring prolonged standing and heavy lifting.

***I am hearing a sound while moving my joint. Should I be concerned about it?***

Sound heard or felt while moving the joint could be a feature of osteoarthritis. But these types of sounds could be heard while moving the normal joint also. So only when there is pain associated with the sound while moving the joint, one should seek medical attention.

***Should I adopt any change in life style if I have osteoarthritis of the knees?***

Yes. Reduce your body weight as much as you can. This is important because while getting up from sitting or squatting position about 250-300 times of your body weight passes through the knee joint. So even if you lose one or two kilograms that will help the progression of the diseases.

Please don't use Indian toilet and use only European toilet. Please don't climb stairs. As far as possible try to use lift. If you belong to Muslim community kindly do namaz or daily prayers while sitting on a chair. If you belong to Hindu community please do not sit down while performing pooja or feasting. All this will again help in reducing the stress on the knees.

Patients with OA hip are benefited by using a cane, which help in reducing the pain. The cane should be held in the hand opposite to the affected hip and should be advanced with the affected limb while walking.

***Is there any role of exercise program in managing osteoarthritis of knees and hips?***

Yes. Exercise therapy decrease pain and improve functional capacity. It is more helpful in osteoarthritis of the knees rather than hips. Osteoarthritis of the knees can have pain intermittently or there can be exacerbation already existing pain. In painful episodes, exercises in a non weight bearing position (cycling, quadriceps contraction exercises) or in partial weight bearing position (aquatic exercises) should be done.

In painless episodes stretching exercises of the knees should be performed. The exercises should be performed at least 3-7 times a week. Efficacy is better in compliant patients.

***What are the drugs available for the management of osteoarthritis?***

Apart from pain killers other drugs are available for the management of osteoarthritis. They are diacerein, glucosamine and chondroitin sulphate. The efficacies of these drugs are variable. Some patients may benefit from these drugs substantially.

In addition, injections (hyaluronic acid) can be given directly into the joints. Benefit obtained with this is similar to that of pain killers. Sometimes pain killers can produce burning sensation in the stomach, which is not seen with this injection.

***Is there any role for surgery in osteoarthritis?***

Yes. If the patient is having severe pain which is present even at rest surgery could be attempted. This would decrease the number of pain killers in a patient with osteoarthritis.

The surgeries performed are osteotomies (cutting a part of the bone to correct the distorted alignment of the joint) and replacement of the damaged joints. After replacing the joint, patient will have significant relief from pain and the mobility will be almost similar to that of before surgery.

