#### What is knee osteoarthritis

Knee osteoarthritis (OA) is a common degenerative joint disease that affects the cartilage in the knee. Over time, the cartilage, which cushions the ends of bones, breaks down, leading to pain, swelling, stiffness, and decreased mobility. This condition is often referred to as "wear and tear" arthritis, as it typically develops gradually with age, though it can also be triggered by injury or repetitive stress on the knee joint.

### What are the symptoms of knee osteoarthritis

- 1. **Pain**: This is the most common symptom, often felt during or after movement. The pain can be sharp or aching and usually worsens with activity and improves with rest.
- 2. **Stiffness**: Stiffness, especially in the morning or after periods of inactivity, is common. It tends to improve with movement but can return after rest.
- 3. **Swelling**: The knee may become swollen due to inflammation in the joint, leading to a feeling of warmth or puffiness around the knee.
- 4. **Reduced Range of Motion**: Difficulty in fully bending or straightening the knee, resulting in decreased flexibility and difficulty performing everyday activities like walking, climbing stairs, or getting in and out of chairs.
- 5. **Grinding or Crackling Sensation (Crepitus)**: Some people experience a grinding, clicking, or cracking sound when moving the knee joint due to roughened surfaces of cartilage or bone rubbing against each other.
- 6. **Weakness or Buckling**: The knee joint may feel unstable or "give way," leading to a feeling of weakness or buckling, especially when standing or walking.
- 7. **Bone Spurs**: In severe cases, bony growths (osteophytes) may form around the joint, which can cause additional pain and limit movement.
- 8. **Deformity**: Over time, the knee may appear misshapen or develop a visible deformity (e.g., bowlegged or knock-kneed appearance) due to joint changes.

### Prescription for the of knee osteoarthritis

### Medications

- Pain Relievers:
  - o Acetaminophen (e.g., Tylenol) for mild pain.
  - Nonsteroidal Anti-Inflammatory Drugs (NSAIDs) such as ibuprofen (Advil, Motrin) or naproxen (Aleve) for pain relief and to reduce inflammation.
- Topical Treatments:
  - o Topical NSAIDs (e.g., diclofenac gel) applied directly to the knee.
  - Capsaicin Cream: Applied to the skin to help reduce pain.

- Corticosteroid Injections:
  - Reduces inflammation and provides short-term pain relief. Administered directly into the knee joint.

# 2. Lifestyle Modifications

- Weight Management: Reducing weight to decrease pressure on the knee joint.
- Exercise: Low-impact activities like swimming, cycling, or walking, along with strengthening exercises to support the knee muscles.

### 3. Physical Therapy

- Therapy Programs: Physical therapy to strengthen muscles around the knee, improve range of motion, and reduce stiffness.
- Assistive Devices: Use of knee braces, shoe inserts, or walking aids (e.g., cane) to reduce stress on the joint.

# 4. Advanced Treatments (if necessary)

- Hyaluronic Acid Injections: Lubrication injections for improved joint movement.
- Surgery: In severe cases, partial or total knee replacement surgery may be recommended.

Consult a healthcare provider before starting any treatments to ensure proper diagnosis and care.

#### What age does of knee osteoarthritis usually occurs?

Knee osteoarthritis (OA) commonly occurs in older adults, typically starting around age 50 and above. However, it can develop earlier in individuals with certain risk factors, such as:

- Previous knee injuries (e.g., fractures, ligament injuries)
- Obesity, which adds extra stress on the knee joints
- Genetic predisposition, as a family history of OA can increase the risk
- Repetitive stress from certain occupations or activities that put a lot of strain on the knees

While age is a significant factor, it's important to note that knee osteoarthritis can affect younger individuals, especially those with the above risk factors.

#### what is the symptom of critical stage

Persistent Pain: Constant pain in the knee, even at rest, which may be sharp or throbbing.

**Severe Stiffness**: Significant stiffness, especially in the morning or after sitting for prolonged periods, making it difficult to start moving.

**Swelling and Inflammation**: Increased swelling in the knee joint, often accompanied by warmth and redness.

**Limited Range of Motion**: Marked difficulty in fully bending or straightening the knee, leading to reduced mobility and difficulty with daily activities.

**Instability**: A feeling of instability or weakness in the knee, which can lead to the knee "giving way" during movement.

**Deformity**: Visible changes in the knee structure, such as bowing or knocking of the knees, due to joint deterioration.

**Crepitus**: A noticeable grinding or cracking sensation during movement, caused by roughened cartilage or bone surfaces.

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#### Chennai

#### 1. Dr. S.S. Kumar

Specialization: Orthopedics

o **Experience:** 31 years

o Consultation Fee: ₹600

o Address: MIOT International Hospital, Manapakkam, Chennai

Contact: MIOT International

#### 2. Dr. Phani Kiran S

Specialization: Orthopedics

Experience: 22 years

o Consultation Fee: ₹1100

o Address: Gleneagles Health City, Perumbakkam, Chennai

o Contact: Gleneagles Health City

#### 3. Dr. Karunakaran S

o Specialization: Orthopedics

Experience: 29 years

o Consultation Fee: ₹1500

Address: MGM Healthcare, Anna Nagar, Chennai

Contact: MGM Healthcare

# 4. Dr. Arun Prakash

Specialization: Orthopedics

Experience: 20 years

Consultation Fee: ₹500

o Address: Murugan Hospitals, Kilpauk, Chennai

Contact: Murugan Hospitals

# 5. Dr. A. Dorairajan

o Specialization: Orthopedics

Experience: 35 years

Consultation Fee: ₹700

o Address: Billroth Hospitals, Shenoy Nagar, Chennai

Contact: <u>Billroth Hospitals</u>

### Coimbatore

# 6. Dr. C.V. Rajasekaran

o Specialization: Orthopedics

Experience: 30 years

Consultation Fee: ₹600

Address: Ganga Hospital, Coimbatore

o Contact: Ganga Hospital

# Madurai

# 7. Dr. S. Ramachandran

o Specialization: Orthopedics

o **Experience:** 25 years

o Consultation Fee: ₹500

o Address: Apollo Hospital, Madurai

Contact: <u>Apollo Hospital</u>

#### What are the causes of Knee osteoarthritis

Knee osteoarthritis (OA) is primarily caused by the wear and tear of cartilage due to aging, leading to increased joint friction. Excess body weight puts additional stress on the knee joints, accelerating cartilage breakdown. Previous knee injuries, such as fractures or ligament tears, can also predispose individuals to OA. Genetic factors may influence cartilage quality and joint structure, increasing susceptibility. Additionally, repetitive stress from certain occupations or activities can contribute to the development of knee osteoarthritis.

# **Prevention of of Knee osteoarthritis**

To prevent osteoarthritis (OA), maintain a healthy weight through balanced nutrition and regular low-impact exercise. Engage in strength training and flexibility exercises to support joint health and reduce injury risk. Use proper lifting techniques and protective gear during physical activities to prevent joint injuries. Limit high-impact exercises that stress the joints and stay hydrated to maintain joint lubrication. Regular health check-ups can help monitor joint health and manage any existing conditions effectively.