

## Conservative Management of Osteoarthritis

Osteoarthritis (OA) is a common degenerative joint disease that affects millions of people worldwide. It primarily involves the breakdown of cartilage, leading to pain, stiffness, and reduced mobility. Successful conservative management can alleviate symptoms and improve quality of life non-surgically. This is an overview of evidence-based strategies for managing osteoarthritis conservatively.

### 1. Lifestyle Modifications

#### Weight Management:

Maintaining a healthy weight reduces the load on weight-bearing joints, significantly lowering the risk of OA progression and reducing pain.

Action: Aim for a balanced diet rich in fruits, vegetables, lean proteins, and whole grains. Regular exercise can help achieve and maintain a healthy weight.

#### Exercise:

Regular physical activity strengthens muscles around the joints, improves flexibility, and reduces pain and stiffness. Both aerobic exercises (e.g., walking, swimming) and strength training are beneficial.

Action: Engage in low-impact aerobic exercises for at least 150 minutes a week and perform strength training exercises twice a week. Activities like yoga and tai chi can also improve flexibility and balance.

### 2. Physical Therapy

#### Exercise Programs:

Tailored exercise programs designed by physical therapists can enhance joint function, reduce pain, and improve mobility.

Action: Consult a physiotherapist for a personalized exercise regimen that includes range-of-motion exercises, strengthening exercises, and aerobic conditioning.

#### Assistive Devices:

Using devices like braces, orthotics, and canes can help support affected joints, reducing pain and improving function.

Action: A physical therapist or occupational therapist can recommend appropriate assistive devices based on individual needs.

### 3. Pharmacological Treatments

#### Anti-inflammatories:

Medications such as Paracetamol and non-steroidal anti-inflammatory drugs (NSAIDs) can modulate inflammation and help in managing mild to moderate pain.

Action: Use medications as directed. Topical NSAIDs and capsaicin creams can also provide localized pain relief with fewer systemic side effects.

#### 4. Injections

\*\*\*\* injections are not recommended too close to a planned surgery as it may increase the risk of an infection

##### Corticosteroid Injections:

Steroid injections can provide short-term pain relief for inflamed joints, although their benefits may diminish with repeated use.

##### Hyaluronic Acid Injections

HA injections can lubricate the joint, providing pain relief and improved mobility, especially in knee osteoarthritis.

#### 5. Complementary Therapies

##### Acupuncture:

Some studies suggest that acupuncture can reduce pain and improve function in osteoarthritis patients.

##### Supplements:

The evidence is mixed, however, supplementation can help reduce pain and slow down progression for some individuals. Supplements that have better effects include collagen, curcumin, *Boswellia serrata* extract, pycnogenol, methylsulfonylmethane, glucosamine and chondroitin, amongst others.

#### 6. Patient Education and Self-Management

##### Education Programs:

Continuous patient education programs can enhance understanding of osteoarthritis, improve coping strategies, and promote active participation in self-management.

Action: Participate in arthritis education programs or support groups to stay informed and motivated.

##### Self-Management Techniques:

Techniques such as pacing activities, using joint protection strategies, and engaging in regular physical activity can significantly improve quality of life.

Action: Implement self-management strategies into your daily routine and monitor your symptoms regularly.

Conservative management of osteoarthritis involves a multifaceted approach tailored to individual needs. By incorporating lifestyle modifications, physical therapy, appropriate medications, and complementary therapies, patients can effectively manage their symptoms and maintain a good quality of life. Always check before starting any new treatment to ensure it is safe and appropriate for your specific condition.