

Osteoarthritis Treatment with Hyaluronic Acid Injections

Patient Brochure



## What is Osteoarthritis?

- Osteoarthritis is the degeneration of cartilage in the joint. It is the most common joint disease worldwide.
- As the disease progresses the damage to joint cartilage can lead to considerable joint pain.
- The mobility of the joint can be severely reduced.

# Is Osteoarthritis a question of age?

- Osteoarthritis does not only occur with advancing age. Young people can also suffer from early joint degeneration.
- Excessive joint stress, instable joints and hereditary factors can lead to premature Osteoarthritis progression.
- The causes of non age related
   Osteoarthritis can also be due to the
   individual person's lifestyle.

#### First signs of Osteoarthritis.

- Joint pain on initial movement
- Grating in the joint
- Limited mobility
- Pain when stressing the joint
- Inflammation and swelling

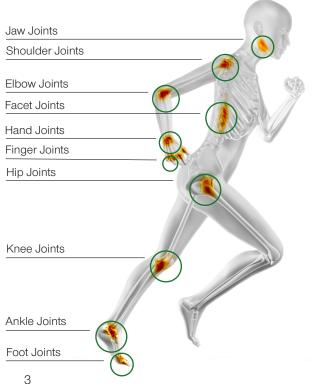
#### Common risk factors:

- Lack of movement
- Obesity
- Differential joint load
- Joint injuries and misalignement
- Hereditary factors



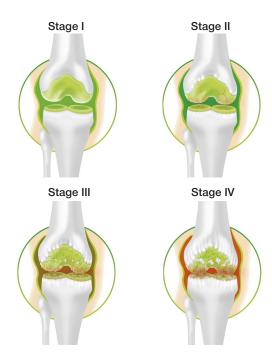
### Which joints can be affected by Osteoarthritis?

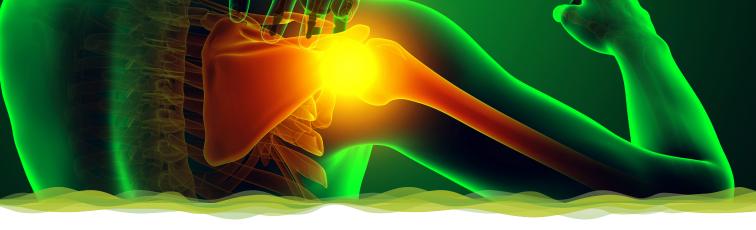
Osteoarthritis can occur in all synovial joints.



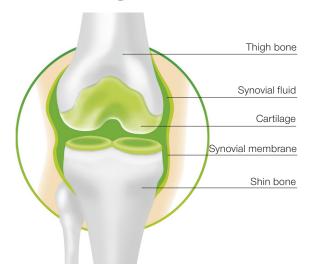
### What are the four stages of Osteoarthritis?

Osteoarthritis can be classified into four different stages. According to these stages the doctor can categorize the degree of severity and propose an individual and appropriate treatment.





### Stage I



### Stage II

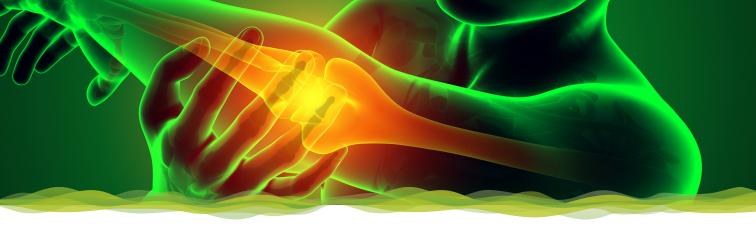


#### Early Osteoarthritis

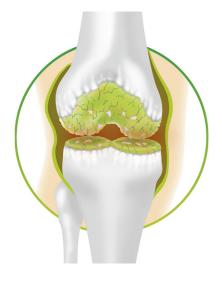
- Barely noticeable cartilage damage
- Slight reduction in joint flexibility
- Little pain

#### Noticeable Osteoarthritis

- Cartilage surface raw and fibrous
- First limitations of mobility
- Perceptible pain



Stage III



Stage IV



#### Advanced Osteoarthritis

- Severe cartilage damage
- Limited mobility
- Middle to severe pain

#### Final stage Osteoarthritis

- Extreme cartilage degeneration
- Complete loss of movement
- Unbearable pain



## What is the role of synovial fluid?

- Synovial fluid (joint fluid) serves as the lubrication and shock absorption of the joint.
- It also supplies the cartilage with important nutrients.
- Synovial fluid ensures the elasticity of the cartilage and the unlimited movement of the joint.
- In the case of Osteoarthritis the amount of synovial fluid and its lubrication properties are reduced.

#### Synovial fluid and Hyaluronic Acid:

- Hyaluronic Acid is a significant constituent of the synovial fluid.
- The quality and amount of the synovial fluid are considerably reduced in the case of Osteoarthritis.

## Can injections with Hyaluronic Acid help?

- Hyaluronic Acid can substantially improve the quality and amount of the existing synovial fluid.
- Injected Hyaluronic Acid increases the elasticity of the cartilage and improves the mobility of the joint.
- Arthro Hyal Inject offers two differently dosed intra-articular Hyaluronic Acid injections which will give your doctor a choice of treatment options.

#### Osteoarthritis treated with Hyaluronic Acid:

- Increases the elasticity of the cartilage
- Improves the mobility of the joint
- · Reduces the pain





### One-Shot

Only 1 Intra-articular Injection per Cycle
- 1 Syringe of 4.8 ml High Content: 120 mg Sodium Hyaluronate
in a sterile pre-filled Syringe
Medical Device





2.5 % Intra-articular

- Designed for the knee joint
- Impressive reduction of pain
- Only 1 Injection per cycle
- **Duration of effect:** Up to 12 months
- Non-allergenic, fermented sourced Hyaluronic Acid
- Improves the viscoelastic properties of synovial fluid



Only 3 Intra-articular Injections per Cycle
- 1 Syringe of 2.0 ml High Content: 44 mg Sodium Hyaluronate
in a sterile pre-filled Syringe
Medical Device



44 mg Sodium Hyaluronate

2.2 % Intra-articular

- For all synovial joints
- Impressive reduction of pain
- Only 3 Injections per cycle
- Duration of effect: Up to 12 months
- Non-allergenic, fermented sourced Hyaluronic Acid
- Improves the viscoelastic properties of synovial fluid



## What can you do additionally?

- Move about as much as you can, but without overloading the joints. In this way you can strengthen and stabilize your joints.
- Suggested way to move the joints are for example swimming, walking or biking.
- Watch your weight and pay attention to a healthy diet.
- In all cases you are strongly advised to consult with your doctor first.

#### Additional Osteoarthritis counter measures:

- Movement and toning of muscles
- Weight reduction
- Optimization of your diet

## Dietary supplementation with ArthroLine





100 % Vegan Nutrient Complex

- Monthly Pack with 60 Tablets High-dose Glucosamine and
Chondroitin with Vitamin C and Copper







100 % Vegan Bi-Phase Liquid
- Monthly Pack with 28 Vials High-dose Glucosamine and
Chondroitin with Hyaluronic Acid,
Vitamin C and Copper





**Practitioner Stamp** 











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