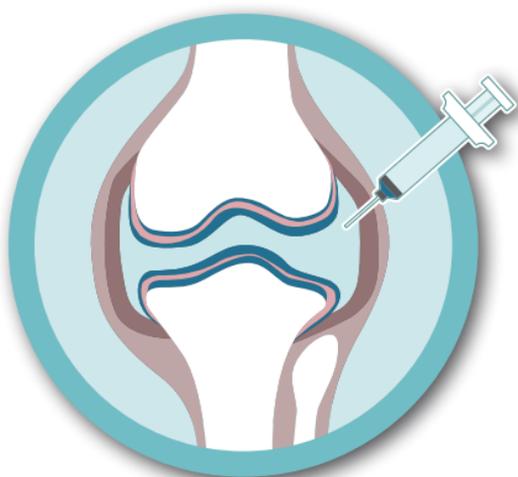


HELP with OSTEOARTHRITIS
 CRESPINE® GEL

Enjoy movement
again

 made
in
Germany



DEAR READER,

Joint degeneration and associated pain are widespread in the population. Alone in Germany are about 5-15 million people affected from (temporary) complaints - in the UK approximately 8.5 million people suffer from osteoarthritis..

These are not just older people. Most commonly knee (gonarthrosis) and hip joints (coxarthrosis) are affected. In principle, however, everyone can be affected by osteoarthritis and its related pain. The pain occurs unexpectedly and varies from movement restrictions to permanent pain, many patients also suffer overnight.

Affected persons cherish the desire for pain relief and an undisturbed participation in the social life or long to restart sportive activities.

The intake of painkillers inhibits the perception of the pain for a certain period of time, but it does not prevent the progression of the disease. Frequently patients who take painkillers for a long time have to deal with their side effects as well.

This information brochure is intended to discuss both the disease itself as well as about options and findings regarding hyaluronic acid therapy.

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OSTEOARTHRITIS

Patients suffering from osteoarthritis feel – depending on the stage of the disease - increasing pain on the affected joint. Patients in advanced stages suffer even without movement under the so-called rest pain.

Also swelling, muscle tension, movement restrictions as well as the increasing deformation of the joint go alongside with the progression of the disease all the way towards the loss of function of the joint.

The diagnosis of osteoarthritis must be made by a doctor who can precisely classify all symptoms.

CAUSES OF OSTEOARTHRITIS

The experts suspect different causes for this disease. For example, an arthrosis occurs as consequential damage after an accident. Also the diet, body weight and lack of exercise or incorrect pressure on the affected joint can play a role.

A healthy joint can usually do movements that are not painful or restricted by friction for a lifetime. Arthrosis is **no sign of aging**, even if it occurs more frequently in old age. Everyone can be affected by osteoarthritis.

JOINTS

THE HEALTHY JOINT

Joint describes the movable connection between bones. Bones are, because of their fine periosteum, very sensitive to pain.

Within the joint, the bones therefore are protected from friction through a cartilage layer. The cartilage takes on a protective and also shock absorbing function. It also nourishes itself from synovial fluid (Synovia). Amongst others this fluid take care for the joints lubrication.



Illustration:healthy joint

The hip joint is the largest joint in the human body and carries together with the knee joint the biggest part of the body weight. These two joints are therefore most often affected by osteoarthritis. The shoulder joint is the third major joint of the body.

THE DISEASED JOINT

When the articular cartilage loses its elasticity, first cartilage cells die and the protective cartilage layer becomes thinner and thinner, even tearing down in some places. The bone tries to balance the decline of the cartilage and forms bulging protuberances. The joint space of a joint affected by osteoarthritis is thereby narrower. Depending on the stage of the disease it can come to inflammatory conditions in the joint and to visible deformations of the joint itself.



Illustration: arthrotic joint

The complete abrasion of the cartilage ends in a complete stiffening of the joint. Such changes of the joint end up for the affected person in increasing pain accompanied by restricted mobility.

IMPORTANCE OF MOVEMENT

Healthy cartilage feeds itself on the synovial fluid and also gets rid of his metabolism waste products through this fluid. This process is primarily enabled through movement.

Regular loading and unloading of the joints are basic requirements for obtaining a healthy cartilage.

Due to lack of movement or incorrect pressure on the joint, the cartilage is undersupplied and cannot regenerate properly.

Once cartilage cells are dead they cannot get replaced through newly formed cartilage cells. Instead collagen fibers are filled into the occurring gaps filled. The beginning of osteoarthritis is initiated.

Suffering persons then mostly begin to ,relieve' their joints, by putting less weight on it.

A healthy musculature and a healthy amount of exercise would be very useful in many cases to nourish and preserve the remaining cartilage.

It is best to consider the topic of exercise with the treating doctor.

Physical activity usually supports the preservation a healthy joint.

Massive amounts of pressure, as common in performance sports, can also damage the joint and lead to osteoarthritis.

Pain relief by an **injection of hyaluronic acid** in the affected joint space can be a significant step towards restarting physical activities. In addition the progression of the disease can be delayed through the additional administration of hyaluronic acid.



THE ROLE OF NUTRITION

The cartilage depends on an uninterrupted supply with important nutrients through the synovial fluid. A balanced diet can additionally support the health of the joints.



THE PSYCHOLOGY OF PAIN

The pain often causes a social retreat, making contacts to friends and family can be inhibited. An unrestricted mobility, but at least a tolerable level of pain are important goals for many patients, also to realize a restful sleep.

The perception of pain is very individual. Strong pain for the one person could be experienced from another one as perfectly comfortable.

Depending on the inner attitude to pain, the psyche and the inner attitude can contribute to make pain bearable. Many patients also benefit from the discussions with other sufferers.

Stopping the circle of pain circulation has a direct effect on your own well-being and takes away the pain's "power".

CRESPINE GEL leads to pain relief through the contained cross-linked hyaluronic acid.

In **CRESPINE GEL +** also the local anaesthetic Prilocaine is included. The aim of treatment with **CRESPINE GEL** is to enhance the natural restore buffer function and to improve joint function.

More and more patients are using this type of injection, to delay pending joint surgery.

HYALURONIC ACID IN OSTEOARTHRITIS

In joints affected by osteoarthritis a lack of synovial fluid is given and therefore the friction between the cartilages in the joint are less well mitigated. The shock absorption and lubrication in the joint is limited by a lack of hyaluronic acid.

COMPENSATION OF DEFICIENCY BY HYALURONIC ACID

A major component of synovial fluid is hyaluronic acid. The Compensation of the lack of this fluid can be done by specialized medical professionals - usually orthopedic physicians or sports physicians (Hyaluronic acid injection).

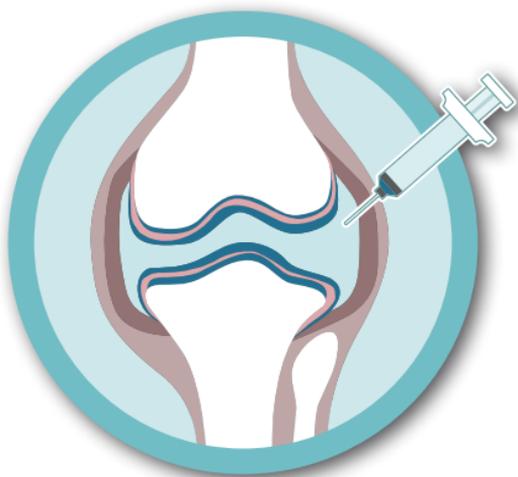


Illustration: hyaluronic acid injection into the joint space

Due to a specially developed manufacturing process nowadays a single injection of cross-linked hyaluronic acid into the joint space is sufficient to create the desired pain relief. Depending on the stage of osteoarthritis this effect persists for a long time.

To prevent allergic reactions in the joint products of non-animal origin should be used.

BENEFITS OF CRESPINE GEL

Only one syringe necessary

Only one injection per treatment cycle is required. The duration of action of **CRESPINE GEL** is at least 6 Months (mild to moderate osteoarthritis).

Relief after only one visit to the doctor

CRESPINE GEL is for direct use in the medical practice determined. The syringe is ready to use and a treatment takes about 10-20 minutes.

Non animal origin

The hyaluronic acid used in **CRESPINE GEL** is of biofermentative origin and therefore particularly compatible for the human body.

A naturally occurring substance

CRESPINE GEL is made up of hyaluronic acid, a substance which naturally occurs in the body and is an essential one Part of the synovial fluid.

Direct treatment of the affected joint

Focused treatment of pain by injection directly into the affected joint space.

CRESPINE GEL + and **CRESPINE GEL** are certified for hip and knee joints.

Cost effective and long lasting

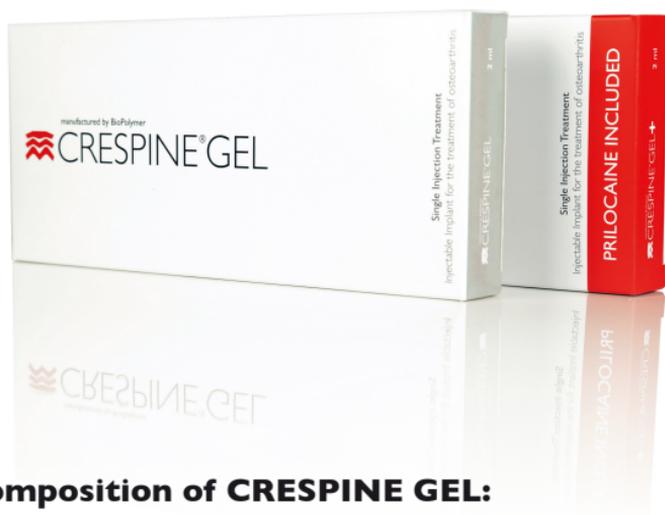
Since **CRESPINE GEL** is a single injection, the treatment may be cheaper than with other products requiring multiple injections per treatment cycle.

The cross-linking of hyaluronic acid makes the product more stable against the body's own degradation processes and ensures a long lasting effect of the pain-reducing effects in the joint.

Suspensive effect

Regular treatment with **CRESPINE GEL** improved the mobility of the joint and retards the cartilage degeneration. The progress of the disease can be slowed down become.

COMPOSITON



Composition of CRESPINE GEL:

1 ml CRESPINE GEL contains:

Sodium hyaluronate	1,0 mg
Cross-linked sodium hyaluronate	14 mg
Sodium chloride	6,9 mg
Water for injection q.s.	1,0 ml

Composition of CRESPINE GEL +:

1 ml CRESPINE GEL + contains:

Sodium hyaluronate	1,0 mg
Cross-linked sodium hyaluronate	14 mg
Sodium chloride	6,9 mg
Water for injection q.s.	1,0 ml
Prilocaine hydrochloride	3,0 mg

CRESPINE GEL + is based on CRESPINE GEL.

Over 200.000 Patients have been treated with CRESPINE GEL and CRESPINE GEL + (until 31.12.2019).

CRESPINE® GEL

Place an order:

-  www.otsclinics.com
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-  +34 (0) 646 363 517



Distribution:

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- Antiaging and Traumatology
- Crespine® / Crespine®Gel+

CRESPINE GEL and CRESPINE GEL + are Class III medical devices (according to Annex II, Paragraph 4 of Directive 93/42/EEC concerning medical devices).

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