

HYALGAN[®]

(sodium hyaluronate)



The **original** and **most researched** hyaluronic acid treatment for osteoarthritis knee pain, proven to be safe and effective.

A PATIENT'S GUIDE

**Proven.
Productive.
Pain Relief.**

www.HYALGAN.com

DO YOU HAVE OSTEOARTHRITIS OF THE KNEE?

Are you experiencing pain or stiffness in your knees? Or has your doctor already diagnosed you with a condition called “osteoarthritis of the knee”? If so, the information in this brochure will help you better understand osteoarthritis, or “OA,” and the various ways your doctor can help you treat it.

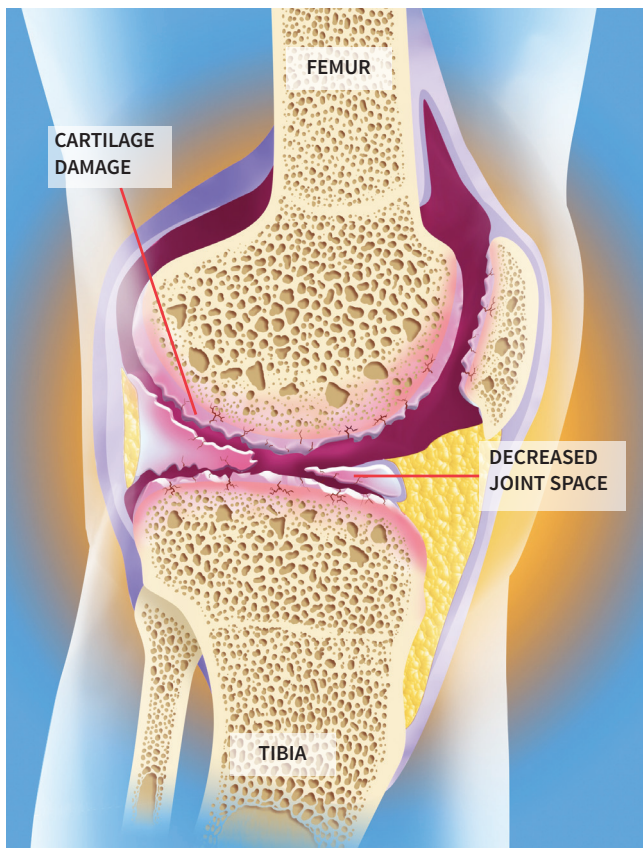
WHAT IS OA OF THE KNEE?

OA is a common condition that causes joints to become stiff and painful. Millions of people have this condition,¹ so, if you have been diagnosed with it, you are not alone!

OA causes the smooth cartilage that covers and protects the ends of your bones to break down. In severe cases, your cartilage thins so much that your bones may begin to rub against each other. The lubricating ability of the natural fluid in your knee diminishes, and the cartilage no longer cushions the joint as well as it once did.¹ This results in stiffness, swelling, and pain that can make walking difficult.

Your family history, age, weight, and any knee injuries you may have had can all play a role in developing OA of the knee.

OA of the knee occurs when the cartilage between two bones becomes worn down and thin.



HYALGAN[®]
(sodium hyaluronate)

WHAT CAUSES OSTEOARTHRITIS OF THE KNEE?

Anyone can get OA of the knee. Although it is most common in people older than 65, people in their 20s or 30s can develop it.² The actual cause of OA is not known. However, there are many things that can contribute to getting the condition.

For some people, genes or family history can affect their chances of developing the disease. For others, their OA knee pain might stem from being overweight or from injuries suffered during an accident.¹ Sometimes, people with sports-related injuries or very active lifestyles can develop OA.

WHAT ARE THE SYMPTOMS OF OA?

If you are reading this, you may already be familiar with some of the symptoms of OA of the knee. Some of the early symptoms may be pain when moving, standing, or sitting. Many people with OA notice that the pain gets worse with exercise but goes away when resting.³

As time goes on, the knee becomes less and less flexible. Stiffness, swelling, and redness are other common symptoms. Some people with OA experience a grating sensation in the knee during movement.^{1,3} These symptoms are often painful and frequent, but they can be managed.

If you are experiencing knee pain or stiffness, swelling of the joint, or a grating sensation in your knee, talk to your doctor about it right away.

WHEN SHOULD I TALK TO MY DOCTOR ABOUT OA?

If you have one or more of the common symptoms of OA, it's important to talk to your doctor. The sooner you speak with your doctor, the sooner you can begin treating your symptoms.

Your doctor will conduct a physical checkup and discuss your symptoms with you in detail. He or she may order an x-ray of your knee. In order to rule out other problems that could be causing your symptoms, your doctor may also draw blood samples and joint fluid samples from your knee for testing.^{1,3}

HOW WILL MY DOCTOR TREAT MY KNEE OA?

If your OA symptoms are mild, your doctor may recommend physical activity, a weight loss program, or a knee brace. Some patients find that strengthening and range-of-motion exercises help with their symptoms. Your doctor might also suggest that you participate in an OA education program or support group.^{1,3,4}

If your OA pain is more intense, your doctor may advise the use of nonprescription pain relievers like acetaminophen, aspirin, or ibuprofen or other prescription drugs. If these options do not work, other available treatments include knee injections with hyaluronates or corticosteroids or knee surgery.^{1,5}

HYALGAN[®]
(sodium hyaluronate)

WHAT IS HYALGAN®?

HYALGAN® is a kind of hyaluronate that is injected directly into your knee by your health care provider. HYALGAN® is one of several hyaluronates that have been approved for the relief of OA knee pain. Hyaluronate is a natural substance found in high amounts in your body's joint tissue and joint fluid. It acts as a lubricant and shock absorber inside the joint, enabling your knee to work properly.^{6,7}

HYALGAN® is proven to work! For more than 25 years, HYALGAN® has helped millions of people worldwide manage their OA knee pain.⁸ HYALGAN® has been administered more than 50 million times.⁸

HOW DOES HYALGAN® FIT INTO MY TREATMENT OPTIONS?

HYALGAN® is for people who do not get enough relief from simple pain relievers or other conservative therapies such as exercise and physical therapy.⁸ Clinical studies have shown that HYALGAN® use is an effective pain-relief option for patients with mild and moderate-grade knee OA.⁹ Use of HYALGAN® in combination with exercise has been shown to improve both knee pain and function.¹⁰ HYALGAN® use may also allow patients to delay knee surgery.^{10,11}

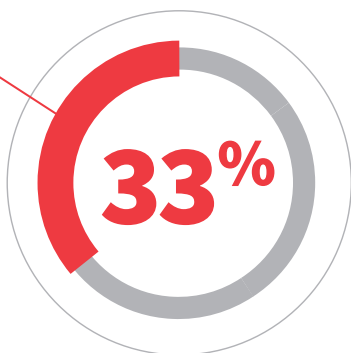
Depending on the severity, your OA knee pain can be managed by physical therapy, pain-relief medications, knee injections, or surgery.

WHAT CAN I EXPECT FROM HYALGAN® TREATMENT?

HYALGAN® has been proven to provide long-lasting relief of OA knee pain. In a published clinical trial, 5 injections of HYALGAN® given once per week for 5 weeks reduced knee pain for up to 6 months.¹² Some patients have experienced pain relief after 3 injections given once per week.* ¹³⁻¹⁵

The number of HYALGAN® injections that you may need will depend on your individual condition and response to HYALGAN® therapy. Only your doctor can determine the number of HYALGAN® injections that are right for you.

Treatment with
HYALGAN®
gave patients a
33%
reduction in pain
with the first cycle
of 5 injections
vs placebo¹²



HYALGAN®
(sodium hyaluronate)

*Some patients may experience benefit with 3 injections given at weekly intervals. This has been noted in studies reported in the literature in which patients treated with 3 injections were followed for 60 days.

CAN I KEEP TAKING MY OTHER MEDICATIONS?

Yes, after you consult with your doctor about the medications you are currently taking. HYALGAN® is a naturally derived product that is delivered via an injection.¹³ It works differently from pain medications because HYALGAN® does not pass through your bloodstream. Instead it works directly in your knee.

In clinical trials, there were no reported drug interactions with HYALGAN®.^{7,16}

The most common adverse events reported in clinical trials with HYALGAN® included injection-site swelling and irritation.¹⁷ Other adverse events observed included gastrointestinal upset. The incidence of gastrointestinal complaints reported with HYALGAN® was similar to those with placebo.¹⁷

CAN I REPEAT MY TREATMENT WITH HYALGAN®?

Yes, you can safely repeat your treatment with HYALGAN®. Studies have shown no serious side effects associated with HYALGAN® following up to 30 months of therapy.¹⁸ Please consult with your doctor to see if you can benefit from repeat treatments.

HYALGAN® has helped millions of people worldwide manage their OA knee pain for more than 25 years.⁸

WHAT OTHER TREATMENTS ARE AVAILABLE FOR OSTEOARTHRITIS?

If you have osteoarthritis, there are several things you can do that do not involve HYALGAN® injections. These include the following: Non-drug treatments such as avoiding activities that cause excess pain in your joints, exercise or physical therapy, or drug therapy including painkillers (acetaminophen and narcotics), drugs which reduce inflammation such as aspirin, nonsteroidal anti-inflammatory agents (e.g., ibuprofen and naproxen), or have corticosteroids injected into the knee joint.

HYALGAN® is used to relieve knee pain due to OA for patients who do not get the relief they want from simple painkillers or from exercise and physical therapy.

HYALGAN®
(sodium hyaluronate)

CAN EXERCISE HELP MANAGE MY OA?

Yes, exercise is an important component of managing OA knee pain. A complete exercise program should include a combination of different types of workouts performed on a regular basis. Exercise may help your OA by keeping joints flexible, increasing muscle strength, and strengthening bones and ligaments. A good workout routine may also help you maintain a healthy weight, have more energy, and sleep better.

It can be tough to get started on an exercise program if you are in pain. It's best to start slowly and give yourself achievable goals. Keep a positive mindset and make it enjoyable.

WHICH EXERCISES ARE BEST FOR MY OA OF THE KNEE?

You'll find a few examples of simple knee exercises on the next few pages. These exercises are designed to stretch and strengthen the muscles around your knee. Before beginning each exercise, read through all of the instructions. While exercising, breathe normally and use smooth movements.

Remember to check with your doctor before starting this or any new exercise program. Your doctor will help you determine which exercises are best for you, how to warm up safely, and whether there are any exercises you should avoid.

Your doctor may refer you to a physical therapist or an occupational therapist—professionals who are trained to design an exercise program for your specific needs. They can teach you about proper body mechanics (for example, how to properly lift a heavy object), joint protection, saving energy, and methods for relieving pain.

HELPFUL EXERCISE TIPS¹⁹⁻²²

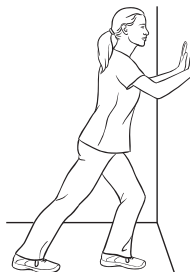
- Discuss your exercise plans with your doctor in order to put together a program that is right for you
- If possible, start your exercise program under the supervision of a physical therapist or qualified athletic trainer
- Choose an exercise program you enjoy and make it part of your regular routine
- Consider putting a heat pack on your joints before you begin exercising
- Start your exercise routine with stretching, flexibility, and range-of-motion exercises
- Use small, light weights (1 or 2 pounds) or exercise bands when you begin strengthening exercises
- Go slowly and increase the difficulty of your exercise routine gradually
- If necessary, apply cold packs to sore muscles when you are finished exercising
- If your joints become painful, inflamed, or red from exercising, talk to your doctor; adjustments to your workout might be necessary

HYALGAN[®]
(sodium hyaluronate)

Exercising With OA

Calf Stretch

1. Stand with your arms braced against a wall, both feet pointing straight ahead. Place your left/right foot several inches behind the other.
2. Bend your front leg. Keep both heels on the floor and your back leg straight. You should feel a slight pull in your calf. Hold for 30 seconds. Bend your back leg and hold for 30 seconds.

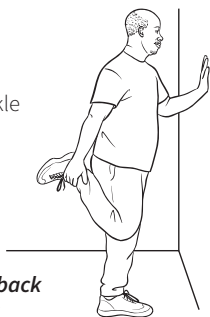


Caution

- Don't lift your back heel
- Don't arch your back

Quadriceps Stretch

1. Stand an arm's length from a wall. Look straight ahead.
2. Place your left/right hand against the wall. With your other hand, grasp the ankle of the foot on the same side. Gently pull your heel to your buttocks.
3. When you feel a mild stretch in your thigh, hold for 30 seconds.

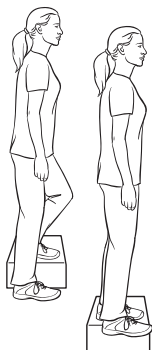


Caution

- Don't arch your back or bend forward
- Don't twist your back to reach your leg

Step-ups

1. Stand with 1 foot on a 4-inch to 6-inch support (such as a block of wood) and the other foot flat on the floor.
2. Shift your weight onto the foot on the block, straightening that knee, and raise your other foot off the floor. Then slowly lower the foot until only the heel touches the floor.



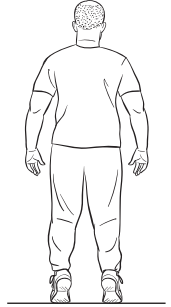
Caution

- Keep your weight on the foot on the block— don't lock your knees
- Don't lock your knees don't push off from the floor

If you feel any pain, stop the exercise. If pain persists, call your doctor.

Toe Raises

1. Stand with both feet flat on the floor, shoulder-width apart. If you need support, steady yourself with your hand on a ledge, wall, or table.
2. Raise both heels so you're standing on your toes. Hold for 30 seconds. Slowly lower your heels to the floor.
3. As you become stronger, stand on one foot at a time and raise that heel off the floor.



Caution

- Don't lock your knees
- Don't arch your back

Wall Slide

1. Stand with your back and head against a wall. Look straight ahead. Keep your feet shoulder-width apart and 6 to 8 inches from the wall. Relax your shoulders and tighten your stomach muscles.
2. Slowly slide straight down until you feel a stretch in the front of your thighs. Hold for 30 seconds. Slowly slide back up.

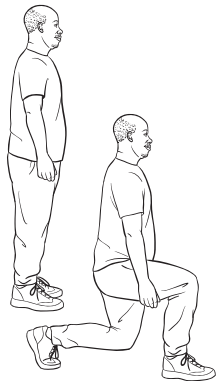


Caution

- Don't let your knees go forward past your toes
- Don't let your buttocks sink below your knees

Leg Lunge

1. Stand with your feet shoulder-width apart.
2. With your left/right foot, step out and lower yourself into a comfortable position. Keep your back straight and your feet pointing straight ahead. As you step, the heel of the other foot lifts off the floor. Return smoothly to your starting position.



Caution

- Don't lunge so far that your rear knee touches the floor
- Don't let your forward knee go past your toes

INDICATION

HYALGAN® is indicated for the treatment of pain in osteoarthritis (OA) of the knee in patients who have failed to respond adequately to conservative nonpharmacologic therapy, and to simple analgesics, e.g., acetaminophen.

IMPORTANT SAFETY INFORMATION

- Before receiving HYALGAN®, tell your doctor if you have an infection/skin disease in the area of the injection site. Inform your doctor if you have experienced any signs or symptoms of an allergic reaction to other hyaluronans or bird proteins, feathers and egg products. Signs include rash, itching, hives, flushing, swelling of face, tongue or throat; difficulty breathing or swallowing or shortness of breath.
- HYALGAN® is not approved for relieving pain in other joints besides the knee, for injection with other substances in your knee joint, or for children. Injections must only be given by trained and licensed healthcare professionals. HYALGAN® has not been tested in pregnant or nursing women. Tell your doctor if you think you are pregnant or if you are nursing a child. The safety of repeat treatment cycles of HYALGAN® has been established.¹⁸
- Talk to your doctor before resuming strenuous or prolonged weight-bearing activities after treatment.
- The side effects most commonly seen after injection into the knee joint can include knee pain, discomfort, swelling/effusion, warmth, redness or stiffness at the injection site. These symptoms disappear within a few days by resting the affected joint and applying ice. If any of these symptoms or signs appears after you are injected, or if you have any other problems, contact your doctor.

Please visit www.HYALGAN.com for full prescribing information including indications, contraindications, warnings, precautions and possible side effects.

Patient Support

COMPREHENSIVE PATIENT SUPPORT

Treatment with HYALGAN® is covered by many health insurance plans, including Medicare, most managed care organizations, and other third-party insurers.

If you need help paying for your HYALGAN® therapy, you can call the HYALGAN® Support Hotline at

1-866-7-HYALGAN (749-2542)

(select option 2)

*Monday through Friday,
9 AM to 8 PM Eastern Time.*

Our friendly HYALGAN® experts are available to answer your questions and work with you and your doctor to obtain the maximum insurance coverage for which you may be eligible.

References: 1. Parmet S, Lynn C, Glass RM. Osteoarthritis of the knee. *JAMA*. 2003;289(8):1068. 2. Buckwalter JA, Saltzman C, Brown T. The impact of osteoarthritis: implications for research. *Clin Orthop Relat Res*. 2004;427 suppl:S6-S15. 3. Bijlsma JWJ, Berenbaum F, Lafeber FPJG. Osteoarthritis: an update with relevance for clinical practice. *Lancet*. 2011;377(9783):2115-2126. 4. Patel S, Hossain FS, Paton B, Haddad FS. The effects of a non-operative multimodal programme on osteoarthritis of the knee. *Ann R Coll Surg Engl*. 2010;92(6):467-471. 5. American College of Rheumatology Subcommittee on Osteoarthritis Guidelines. Recommendations for the medical management of osteoarthritis of the hip and knee: 2000 update. *Arthritis Rheum*. 2000;43(9):1905-1915. 6. Balazs EA, Denlinger JL. Viscosupplementation: a new concept in the treatment of osteoarthritis. *J Rheumatol Suppl*. 1993;39:3-9. 7. Kelly MA, Goldberg VM, Healy WL, Pagnano MW, Hamburger MI. Osteoarthritis and beyond: a consensus on the past, present, and future of hyaluronans in orthopedics. *Orthopedics*. 2003;26(10):1064-1079. 8. HYALGAN® safety data. Data on file, Fidia Farmaceutici S.p.A. 9. Bruyère O, Cooper C, Pelletier JP, et al. An algorithm recommendation for the management of knee osteoarthritis in Europe and internationally: A report from a task force of the European Society for Clinical and Economic Aspects of Osteoporosis and Osteoarthritis (ESCEO). *Sem Arthritis Rheum*. 44(3):253-263. 10. Neustadt DH. Long-term efficacy and safety of intra-articular sodium hyaluronate (Hyalgan®) in the treatment of osteoarthritis of the knee. *Clin Exp Rheumatol*. 2003;21(3):307-311. 11. Turajane T, Labpiboonpong V, Maungsiri S. Cost analysis of intraarticular sodium hyaluronate treatment in knee osteoarthritis patients who failed conservative treatment. *J Med Assoc Thai*. 2007;90(9):1839-1844. 12. Altman RD, Moskowitz R, the Hyalgan® Study Group. Intraarticular sodium hyaluronate (Hyalgan®) in the treatment of patients with osteoarthritis of the knee: a randomized clinical trial. *J Rheumatol*. 1998;25(11):2203-2212. 13. Grecomoro G, Martorana U, Di Marco C. Intra-articular treatment with sodium hyaluronate in gonarthrosis: a controlled clinical trial versus placebo. *Pharmatherapeutica*. 1987;5(2):137-141. 14. Bragantini A, Cassini M, De Bastiani G, Perbellini A. Controlled single-blind trial of intra-articularly injected hyaluronic acid (Hyalgan®) in osteoarthritis of the knee. *Clin Trials J*. 1987;24(4):333-340. 15. Carrabba M, Paresce E, Angelini M, Re KA, Torchiana EEM, Perbellini A. The safety and efficacy of different dose schedules of hyaluronic acid in the treatment of painful osteoarthritis of the knee with joint effusion. *Eur J Rheumatol Inflamm*. 1995;15(1):25-31. 16. Hammesfahr JF, Knopf AB, Stitik T. Safety of intra-articular hyaluronates for pain associated with osteoarthritis of the knee. *Am J Orthop (Belle Mead NJ)*. 2003;32(6):277-283. 17. HYALGAN® [package insert]. Parsippany, NJ; Fidia Pharma USA Inc., May 2014. 18. Scali JJ. Intra-articular hyaluronic acid in the treatment of osteoarthritis of the knee: a long-term study. *Eur J Rheumatol Inflamm*. 1995;15(1):57-62. 19. *Exercise and Your Arthritis*. Atlanta, GA: Arthritis Foundation; 2001. 20. *Good Living With Osteoarthritis*. Atlanta, GA: Arthritis Foundation; 2000. 21. Sayce V, Fraser I. *Exercise Beats Arthritis*. Boulder, CO: Bull Publishing Company; 1998. 22. Sobel D, Klein AC. *Arthritis: What Exercises Work*. New York, NY: St. Martin's Press; 1993.

HYALGAN[®] *(sodium hyaluronate)*

KNEE PAIN RELIEF FOR PEOPLE LIKE YOU

With more than **25 years of experience**
and more than **50 million injections**
administered worldwide, HYALGAN[®]
is a proven treatment that relieves
OA knee pain for people just like you.⁸

***If you have OA knee pain,
ask your doctor if
HYALGAN[®] is right for you.***

Visit www.HYALGAN.com to find more information
about OA knee pain and treatment with HYALGAN[®],
frequently asked questions or helpful tips and useful links



HYALGAN[®] IS A REGISTERED TRADEMARK OF FIDIA FARMACEUTICI S.P.A., ITALY.
HYALGAN[®] IS MANUFACTURED BY FIDIA FARMACEUTICI S.P.A., ABANO TERME, ITALY.

©2018 FIDIA PHARMA USA INC., FLORHAM PARK, NJ 07932, A WHOLLY-OWNED SUBSIDIARY OF
FIDIA FARMACEUTICIL S.P.A., ITALY.