



GET BACK
TO WHAT
YOU LOVE



UNDERSTANDING **ANKLE** **REPLACEMENT**

This brochure offers a brief overview of ankle anatomy, arthritis and ankle replacement. This information is for educational purposes only and is not intended to replace the expert guidance of your physician. Please direct any questions or concerns you may have to your doctor.

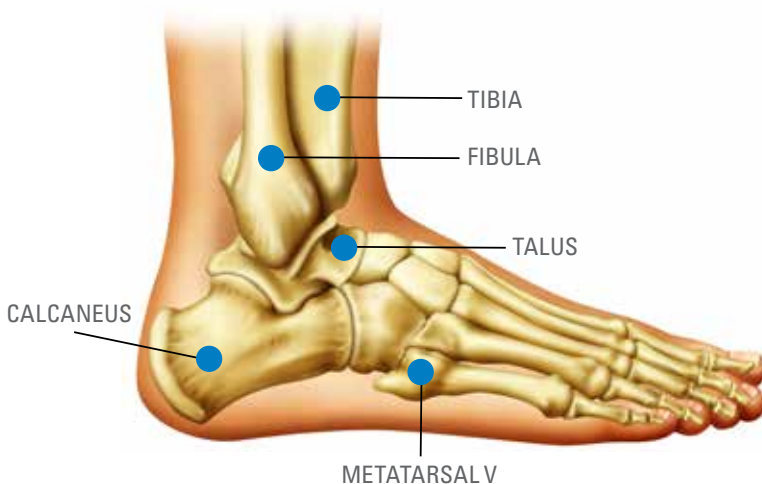


ANKLE ARTHRITIS

YOUR ANKLE

Your ankle is made up of a variety of bones, ligaments, tendons and cartilage that connect at the junction of your leg and foot. The joint works like a hinge and is responsible for moving your foot up and down.

The tibia (shinbone), talus and fibula (smaller bone in the lower leg) are the bones that construct the ankle joint. Your ligaments border these bones on either side, holding them together to provide stability. Meanwhile the tendons connect the muscles to the bone and are responsible for the ankle and toe movements. Covering your bones is a smooth substance called cartilage, which acts as a cushion to reduce the friction between your bones as they move. If your cartilage wears down, arthritis can develop and cause loss of motion and pain.





ARTHRITIC ANKLE



HEALTHY ANKLE

Nearly half of individuals over the age of 60 have foot or ankle arthritis.

ARTHRITIS

Nearly half of individuals over the age of 60 have foot or ankle arthritis that may not cause symptoms.¹ However, for those suffering from ankle arthritis pain the most reported causes are:²

- **Rheumatoid arthritis** - It is an autoimmune disease that attacks multiple joints and typically starts in the hands and feet. The lining surrounding your joints swells and becomes inflamed, destroying the cartilage, ligaments and other tissues around it. This could potentially lead to joint deformities and stress fractures.
- **Post-traumatic arthritis** - The most common cause of ankle arthritis and is typically caused by physical injuries, such as fractures or dislocations, or associated with a traumatic event, such as a car accident, sports injury or fall.³ According to the American Academy of Orthopaedic Surgeons, people are seven times more likely to develop arthritis in a joint that has been previously injured.⁴
- **Osteoarthritis** - It is the wearing down of the cartilage in the joint. The cartilage can become frayed and rough and the protective space between the bones is reduced, causing bone-on-bone rubbing and osteophytes. Age is the most common reason for osteoarthritis, but family history and crystalline diseases, such as gout⁵ or pseudogout, can also play a role in its development.⁶



For those suffering from symptomatic ankle arthritis, the most reported causes are post-traumatic arthritis.⁷

TREATMENT OPTIONS

At first, your doctor may recommend one of several non-surgical treatment options, such as:

- Over-the-counter medications
- Physical therapy
- Orthotic shoes
- Supportive braces

Expertise from a foot and ankle specialist can help determine your best treatment option. If non-surgical treatments do not provide relief, your doctor may recommend surgery. Common surgical options include ankle fusion and total ankle replacement.

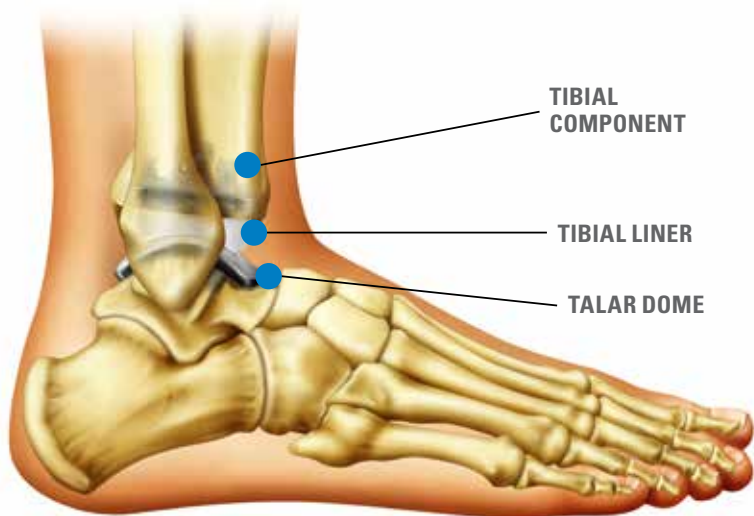
SURGICAL OPTIONS

ANKLE FUSION

In ankle fusion, the ankle bones are fused together, eliminating the motion in the joint.⁴ Pins, plates, screws and rods hold the bones together until they are healed and become one. The goal of this procedure is to reduce pain from the arthritic joint.

This procedure blocks movement at the ankle joint, specifically the up and down motion of the foot. For example, this may make it difficult to wear high heels after surgery. It can also potentially cause patients to walk with a limp or develop arthritis in the surrounding joint areas.⁸ While fusions are a successful treatment option for ankle arthritis, advancements in ankle replacement surgery have given patients a more functional treatment option.





ANKLE REPLACEMENT

Ankle replacement has been around for more than 30 years, however it didn't gain popularity until the 1990's when technology and instrumentation became more sophisticated.⁹ Today, an increasing number of patients in the U.S. undergo this surgery intended to regain motion and reduce pain.¹⁰

Unlike an ankle fusion, an ankle replacement removes the diseased portions of the bone and cartilage, and replaces them with metal and high medical quality plastic components. This allows patients to retain more of their natural anatomy and movement while reducing pain.^{3,4,11-15}



WHAT HAPPENS IN **ANKLE REPLACEMENT SURGERY?**

Patients will undergo anesthesia or a nerve block and can expect to be in the operating room between two and three hours. The surgeon will make an incision either at the front or the side of the ankle, depending on the type of implant. The diseased portions of the bones and cartilage are removed and the metal and plastic implant components are placed accordingly. Once the implant is inserted, the wound is sealed and a splint or cast is applied.

POST-SURGERY PROCEDURE

A majority of patients can return to partial weight-bearing activities three weeks after surgery, and all patients by six weeks. Activities like golf may be resumed between three and four months after surgery and full recovery may take as long as six months with continuous improvement for the next two years. Your doctor will decide if physical therapy is right for you and what restrictions may apply.

Every patient recovery experience is unique, so be sure to talk with your doctor about your progress. The information above is based on the experiences of Vantage Ankle design team surgeons.





THE VANTAGE® TOTAL ANKLE

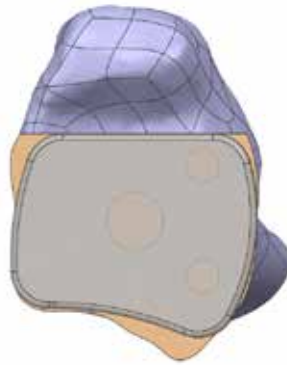
The Exactech Vantage® Total Ankle was created by a team of engineers and global surgeon leaders who are passionate about getting patients back to what they love.

SHAPE

The Vantage Ankle is designed with the latest advances in total ankle research to mimic the patient's ankle shape and support natural movement.¹⁶ The base (tibia) of the implant has a curved shape to better match the patient's anatomy, which is different from historical designs that used a trapezoidal shape.¹⁷



HISTORICAL DESIGN¹⁷



VANTAGE TOTAL ANKLE

DESIGNED TO RESPECT YOUR NATURAL ANATOMY¹⁶

Your ankle moves in complex ways. Ligaments, tendons and bones all seamlessly work together to create fluid movement. The Vantage Ankle was designed to cater to your natural motion and keep as much of your natural bone as possible.

The talar dome's (see below) wave-like shape is designed to mimic the ankle's natural anatomy.^{16,18} The Vantage Ankle can help you get back to what you love —one step at a time.



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SUMMARY

This brochure is not intended to replace the experience and counsel of your physician. Surgery is one of the most important decisions you will make. Total ankle replacement has allowed many people to return to more active lifestyles. Your doctor will help you decide if it's the right choice for you.

With any surgery, there are potential risks, and results will vary depending on the patient. Joint replacement surgery is not for everyone. Check with your physician to determine if you are a candidate for joint replacement surgery. Your physician will consider the risks and benefits associated with this procedure, as well as individual factors, such as the cause of your condition, age, height, weight and activity level.

For more information

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