

## What helps in Ankle Osteoarthritis?

### Ankle Osteoarthritis

Osteoarthritis of the ankle joint often affects active people and especially athletes. Because unlike many other degenerative diseases, increasing age is not usually to blame here, but previous injuries - often in accidents and during sports. However, what can you do about ankle osteoarthritis? Prof. Dr. Victor Valderrabano, MD PhD, answers the most important questions about osteoarthritis of the ankle joint. He is an internationally renowned specialist in orthopedic surgery and chief physician at the SWISS ORTHO CENTER in Basel.



Prof. Dr. Victor Valderrabano, SWISS ORTHO CENTER Basel

*Interview: Susanne Amrhein, PRIMO MEDICO*

#### How does Osteoarthritis of the Ankle feel?

Prof. Valderrabano: "Our ankle/hindfoot system actually consists of two joints: The "lower" ankle or subtalar joint allows us to tilt the foot to both sides. The "upper" ankle or ankle joint lets us bend and straighten the foot. If osteoarthritis develops here, those affected initially only feel pain when they start to move and during longer heavy loads. Only later does the pain become permanent. And not only during the day when walking and under stress, but also at night or when resting. Those are the typical symptoms. If they appear and don't go away on their own, it is important to get them checked out by an Orthopaedic Surgeon who specializes in the foot and ankle."

### **What are the causes of Ankle Osteoarthritis?**

Prof. Valderrabano: “Of all the joints in the body, our ankle has to bear the heaviest load. Therefore, it is also particularly susceptible to osteoarthritis. In 80 percent of the cases, osteoarthritis is caused by a previous injury. This can be an ankle fracture in an accident that doesn't heal well. If the cartilage is injured in one place, excessive wear and tear occurs here under load. Other causes are ligament instability after an ankle sprain or weakness of tendons and muscles. Malpositions such as a flatfoot or a pes cavus can also cause osteoarthritis. Athletes, especially professional athletes in soccer or tennis, are particularly at risk of developing osteoarthritis due to the extreme stress.

### **What can you do about Ankle Osteoarthritis?**

Prof. Valderrabano: “You don't need to be afraid that an operation is imminent. In the first step, we always treat an ankle osteoarthritis conservatively. In a slightly advanced stage, physiotherapy, special insoles or orthosis help to relieve the pain. At this stage, hyaluronic acid injections, autologous PRP therapy or cartilage regeneration measures with chondroitin sulfate-gluocosamine products are also helpful. In many cases, you can achieve an improvement or delay the course of the disease and an operation. After ankle fractures that have not healed properly or in the case of malpositions, surgical correction of the joint axis with cartilage surgery can often help to relieve the damaged area in the ankle. By compensating for the misalignment or an asymmetry, the load is shifted to another healthy area of the ankle joint. Only at a later stage, when all previous conservative and joint-preserving therapies have not helped, should the next option be a Total Ankle Arthroplasty, an artificial joint replacement, or finally if needed an ankle fusion (arthrodesis) be discussed.”

### **Which shoes, insoles and exercises help with Ankle Osteoarthritis?**

Prof. Valderrabano: “As already mentioned, malpositions can trigger osteoarthritis in the ankle. In the case of flatfeet or pes cavus, insoles can help to prevent incorrect loading of the ankle and excessive wear. Stabilizing and supporting footwear is also important for ligament instabilities. However, one should not rely on sales arguments in the shop, but obtain a diagnosis and advice from an Orthopaedic Surgeon beforehand. Physiotherapy also plays an important role, since guided exercises strengthen stabilizing and supporting muscles. A walking school also helps to improve the gait pattern and avoid incorrect strain.”

## **What helps better with severe Ankle Osteoarthritis: a Joint Replacement or a Fusion?**

Prof. Valderrabano: “It used to be said that it was best to fuse the ankle. The damaged cartilage is removed and the talus bone is screwed to the tibia. This procedure takes away the pain and the ankle joint can bear weight again. By doing this, however, the patients sacrifice their natural movement; because the fusion / arthrodesis, completely eliminates the mobility of the ankle. Further, an ankle fusion changes the biomechanics not only of the foot, but of the whole leg. As a result, other joints have to compensate for the function of the fused ankle and there is a high probability that they will also develop osteoarthritis because of this overload. So, the problem is passed on to another part of the body. With modern Total Ankle Arthroplasties / Prostheses, this risk does not exist. The latest generation of ankle prostheses not only allow normal everyday and leisure movements. With a Total Ankle Arthroplasty, low-impact sports such as cycling, hiking, golf, skiing or swimming are also possible. In my experience and according to the literature, the quality of life with a Total Ankle Arthroplasty is significantly higher than with a fusion. However, be careful: The implantation of a Total Ankle Arthroplasty is a complex procedure and requires a high level of expertise on the part of the operating surgeon. Bone or axis corrections or the reconstruction of ligaments in the ankle joint are often additionally necessary. Whether a Total Ankle Arthroplasty or an ankle fusion – I always advise getting a second opinion before a planned procedure.”

### **Contact:**

Prof. Dr. med. Dr. phil. Victor Valderrabano, MD PhD  
SWISS ORTHO CENTER  
Schmerzklinik Basel, Swiss Medical Network  
Hirschgässlein 15, 4010 Basel, Schweiz  
T +41 61 295 88 80, F +41 61 295 89 74  
[vvalderrabano@swissmedical.net](mailto:vvalderrabano@swissmedical.net)  
[www.swissorthocenter.ch](http://www.swissorthocenter.ch)