Os Trigonum Syndrome

If you have an os trigonum you have an extra bone that has grown behind the ankle. It is joined to the talus through a fibrous band. It presents as a lump under the lower portion of the Achilles tendon.

Having the extra bone is not necessary painful, but it can cause impingement when pointing your foot which is the painful condition known as os trignoum syndrome. The bone can literally become compressed between the ankle bones. For the individual with the syndrome, pointing the toes downward will result in a nutcracker injury. Similar to an almond inside of a nutcracker, the os trigonum is crunched in-between the heel bone and the ankle. As the bone separates, the tissue that connects it to the talus will become torn and the area gets inflamed.

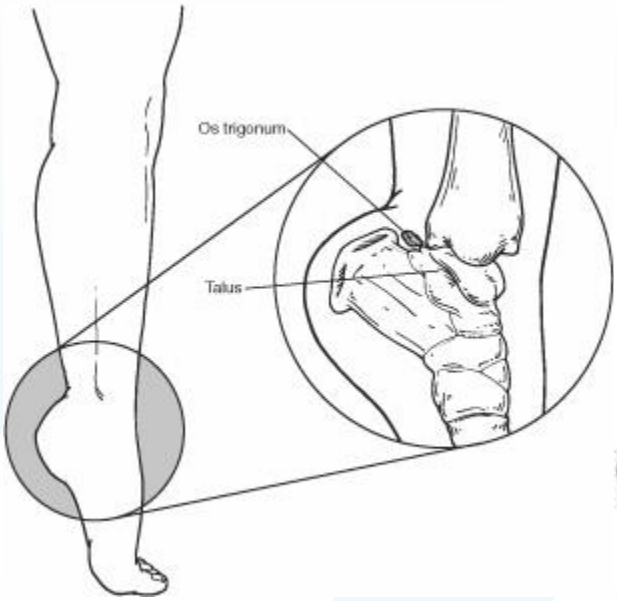
Most commonly it occurs following injury or repeated stress. Usually this happens in cases of ballet dancers or people who repeated put stress through a pointed foot. It can also occur following injury such as an ankle sprain.

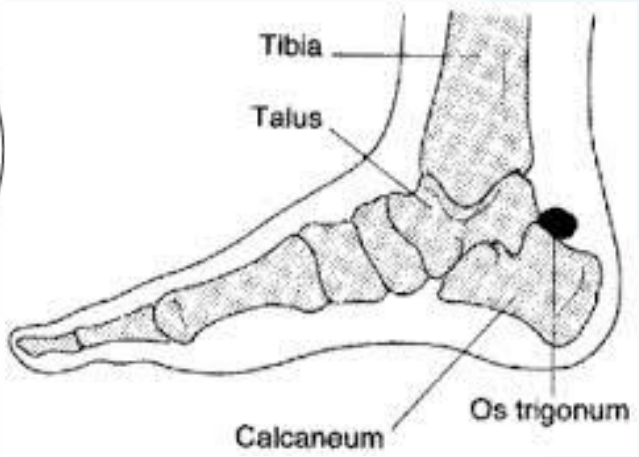
This syndrome can be present in one or both of the feet upon birth. It will often become obvious during adolescence when there is an area of the talus that doesn't properly fuse with the remainder of the bone, which creates this small extra bone. Only a small amount of people actually have this extra bone.

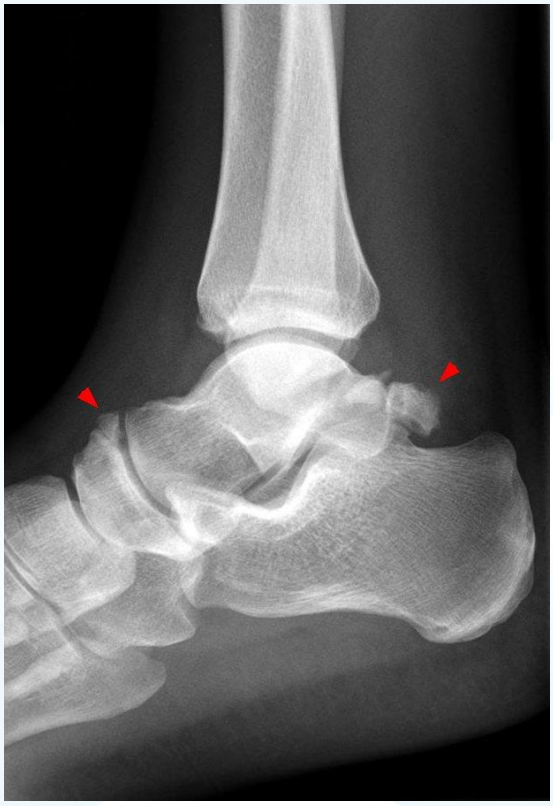
If you have this condition, you will have pain in the back of the ankle around the lower part of the Achilles tendon. Pain will be caused when going on to tip toes or pushing upwards with your feet. It's often tender to touch the back of the ankle and can be inflamed.

Os Trigonum Syndrome

Ankle joints have two bones that pivot and glide over each other, the talus and the tibia. There is a thick covering surrounding the entire ankle joint that keeps all of the joint fluid within the ankle joint. Synovial fluid and the smooth cartilage lining the end of the bone in the joint let the ankle joint move with a minimal amount of friction.







How to Treat Os Trigonum Syndrome:

1. **Rest and Avoid Painful Activities**
   It is important that you stay away from aggravating sports to allow the inflammation time to heal. In most cases this involves avoiding dancing or ballet. Give the area recovery time and see if that is sufficient to stop the pain.

2. **Immobilization**
   Often, you will need a walking boot to restrict movement in the ankle and allow the injured tissues the time they need to heal.

3. **Ice**
   Swelling can be decreased by using a bag of ice on the area for 5-10 minutes at a time three to five times per day. Make sure to use a thin towel over the ice. Don't apply the ice directly onto the skin.

4. **Oral Medication**
   Non-steroidal anti-inflammatory medication can help in reducing inflammation and pain.

5. **Injections**
   Cortisone is sometimes injected into the affected area to reduce pain and inflammation.

6. **Surgery**
   In unresolved cases where less invasive treatments have proven unsuccessful, then the sufferer may need to consider surgical removal of the bone. An incision is made in the back of the heel around the Achilles tendon, and the bone is removed. Healing time is typically 12 weeks and rehabilitation is required during that period with a suitable sports therapist.

Tips:

- Using an ankle brace to prevent excessive ankle flexion can help to prevent any impingement and development of the syndrome.
- When participating in sporting activities, make sure to wear the proper equipment at all times.
- Once you have the bony prominence within the talus bone, there is little that can be done to prevent os trigonum syndrome from occurring.
- If symptoms persist, surgery might be required to remove the bony prominence from within the foot.
- If you notice certain activities cause the condition to become aggravated, refrain from doing them for four to six weeks to allow proper healing time.