An ingrown toenail (Onychocryptosis) is when the nail plate penetrates the skin or nail fold. Often times, this may lead to pain, swelling, drainage, or infection. Any toe can be involved; however the big toe is most commonly affected. Symptoms from an ingrown toenail may develop relatively quickly, as the toenails grow into the skin at the edge or at the front of the toenail. It is not uncommon for an ingrown toenail to recur. Individuals who are prone to toenails that are excessively curved, are predispose to develop ingrown toenails. Onychomycosis (Fungal nails); previous trauma, advanced age, and a host of medical disorders can all damage the nail plate and increase the risk. Thousands of ingrown nail cases are treated each year in medical offices, urgent care facilities and emergency rooms across the country. The majority of these cases can be treated without incident; however they can be very problematic in immunocompromised populations such as diabetics. Immunocompromised patients that suffer from ingrown nails that are not properly observed and/or treated by a medical professional can lead to infections and possibly amputations.

**Treatment**

Ingrown toenails are treated by reducing the soft-tissue swelling, addressing any local infection, controlling the pain, and appropriate trimming of the nails in order to minimize the chance of a recurrence.

*Reducing the swelling*

Soaking the toe in warm salt (saline) water can help kill the local bacteria and soften up the inflamed soft-tissue. Ten-minute soaks, 2-3 times per day, may result in less tissue swelling and therefore an improvement in symptoms.

*Addressing any local infection*

In most instances, the local infection will clear up when the inflamed soft-tissue has settled. Warm salt-water soaks can be helpful. On rare occasions, antibiotics may need to be prescribed to control the infection.
Controlling the Pain

Comfort shoes with a wide toe box are important in the treatment of an acute ingrown toenail. Repetitive bumping up against a tight shoe will be painful and may worsen the condition. Acetaminophen or non-steroidal anti-inflammatory medication may also be used to help control the symptoms of pain in the short term.

Appropriate Trimming of the Toenail

Cutting the toenail straight across is a key component of successfully treating ingrown toenails. Excessively cutting the edges of the toenail may provide some initial relief but may worsen the problem as the toenail grows back.

Surgical Treatment

Fortunately, most ingrown toenails can be treated without surgery. However, for abnormally shaped toenails and others sources of painful recurrent ingrown toenails that cannot be controlled with normal non-operative treatment, surgery may be indicated. Surgery may include:

- **Removal of part of the toenail.** Removing the side of the nail that is growing into the inflamed soft-tissue will clear the symptoms. However, as the nail grows back (~2mm/month), the ingrown toe nail may recur.
- **Removing the entire toenail.** For ingrown toenails involving the lesser toes (toes 2-5), or when there is tissue overgrowth on both sides of the toenail of the big toe, a removal of the entire toenail is indicated. This will usually clear the symptoms, although recurrence of the ingrown toenail can occur as the toenail grows back.
- **Removal of the toenail and removal (ablation) of the nail bed matrix.** Ablation of the nail matrix may be necessary for ingrown toenails that have an unusual shape, and are therefore at a high risk for recurrence, or if previous toenail removal has not successfully treated the condition. In this procedure, the toenail is removed and then the nail bed treated so that the nail will not grow back. This nail bed ablation can be done by surgically removing the nail or by treating it with a chemical such as Phenol that kills (cauterizes) the cells in the nail bed from which the toenail grows. In some instances, not all of the cells will be killed or removed and recurrence of spikes of nail may recur.