

## A GUIDE TO INGROWN TOENAILS

### OVERVIEW

Ingrown toenails may present in patients of all ages, but they have been reported to occur more frequently in young people. Usually the medial or lateral side of the nail irritates or penetrates the skin creating pain, swelling and redness, an infection can easily develop. The great toe is most commonly involved, but ingrown nails can occur on any toe. It is not unusual to encounter bilateral ingrown nails, they may also occur on multiple toes, or on both sides of the same nail. The most common factor contributing to development of an ingrown nail is improper trimming. Other causes such as trauma, shoes, fungal infection, congenital abnormalities, biomechanical foot dysfunction, obesity and pregnancy have all been cited as possible contributing factors. Spontaneous resolution of the condition, especially if the site is infected, is unusual.

### SYMPTOMS

- Pain
- Localized redness and irritation
- Nail plate incurvation, sometimes with penetration of the nail into the skin
- There may be a hypertrophic nail fold or red, hypertrophic granulation tissue present (Fig. 1).
- Infection can easily develop and the site may exhibit purulent drainage or localized cellulitis.

### DIAGNOSIS

- History and physical examination
- X-rays may be taken to examine the bone for abnormalities such as a subungual exostosis, which may contribute to future ingrown nails, or osteomyelitis if there is a severe or chronic infection present.
- Wound cultures and lab studies may be ordered as indicated if a more severe infection or disease is suspected.

### TREATMENT

Treatment with over the counter products and topical or oral antibiotics is usually ineffective since they do not address the ingrown nail itself. In order to resolve the condition the offending nail border must be removed (Fig. 2).

- If the nail is only minimally ingrown the offending border may be removed simply by trimming the nail margin. This does not usually require use of a local anesthetic.
- If the nail is significantly ingrown or an infection is present, removal of the offending nail border and drainage of the infection usually requires local anesthesia and a more aggressive nail border resection. Any hypertrophic granulation tissue is usually resected. Antibiotics should be used appropriately.
- In cases of recurrent ingrown nails a matricectomy may be performed in which the offending portion of the nail is permanently removed.
- If an abnormality of the nail, soft tissue, or bone is present a more involved surgical procedure may be needed to correct the condition and relieve the patient's symptoms.



Fig. 1: Ingrown medial border of great toenail; Red, inflammatory granulation tissue has formed at the site of this ingrown nail that resulted from improper nail trimming.

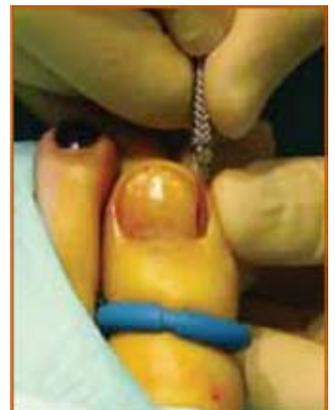


Fig. 2: Removal of the nail border is necessary to correct the condition. Antibiotics may address infection but are ineffective against treating the ingrown nail itself.



Chicago Podiatric Surgeons is dedicated to providing the best possible podiatric care for your patients. This care includes answering patient questions and ensuring they understand their treatment options. Of course, the understanding of treatment options starts with you, the primary care physician. We hope that you find this overview of common podiatric disorders to be helpful in the care of your patients, and that you look forward to receiving future topics from us.

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