Ingrown Toenails

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Ingrown toenails are common, especially in young patients. Several predisposing factors contribute to the formation of an irregular sharp edge (spicule) of the lateral nail plate that penetrates and injures the soft tissue of the lateral nail fold. Depending on the severity of the disease, treatment varies from simple disembedding of the spicule to phenolization of the lateral nail matrix. This article provides a step-by-step guide to the management of patients with ingrown toenails.

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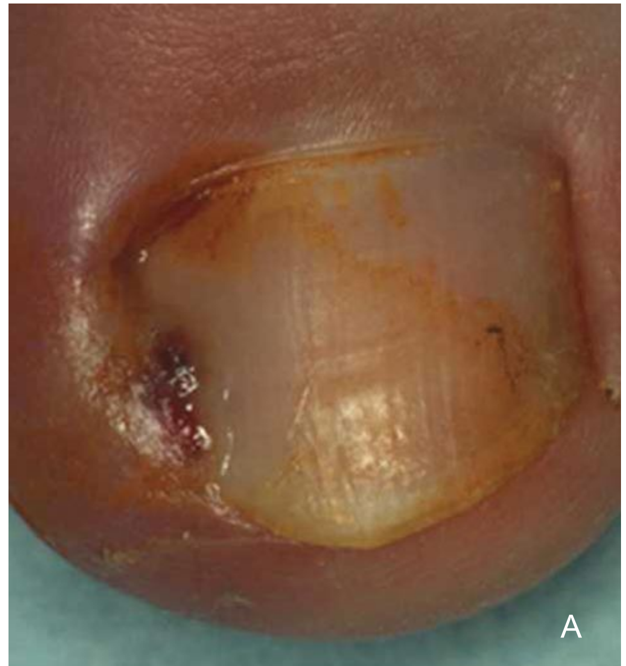
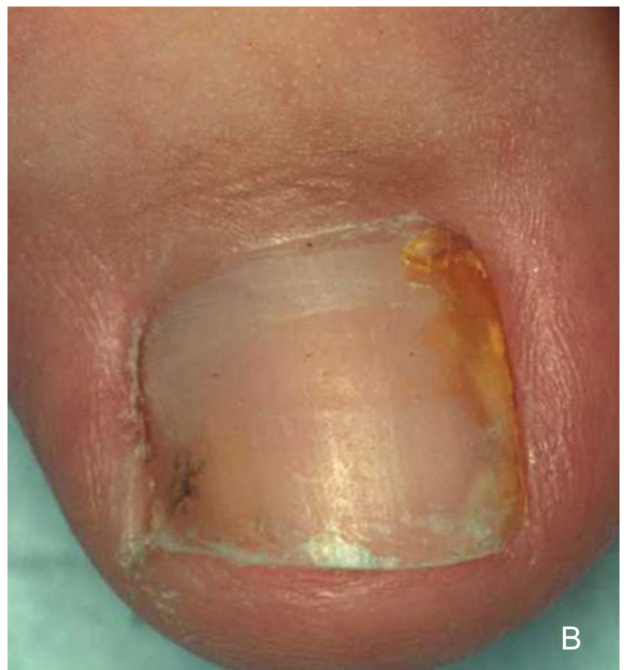
Ingrown toenails are among the most common inflammatory diseases of the nail unit. Compromising the integrity of the nail apparatus, particularly of the great toe I, can cause it to become ingrown. Predisposing factors include cutting nails improperly or tearing them off; wearing narrow-toed shoes or high heels; having wide feet; genetic factors; hyperhidrosis; having a systemic disease; and using certain drugs (eg, retinoids, human immunodeficiency virus protease inhibitors). Any of these factors or conditions can cause the rigid nail spicule to penetrate the surrounding soft tissue, causing a splinterlike foreign-body reaction. Secondary swelling, granulation, and infection sometimes may occur.

Treatment Pearls

An ingrown toenail initially should be treated as a foreign-body reaction. In the early phase of the disorder, the goal of treatment should be to avoid further trauma of the periungual tissues by the spicule, which can be obtained, with or without anesthesia, in 3 different ways. First, gently push wisps of cotton under the involved ingrowing nail using a





Ingrown toenail before (A) and after (B) phenolization.

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2-mm nail elevator or a number 1 or 2 curette, repeating this process if the cotton falls out. Second, gently ease dental floss proximally to lift out the ingrown spicule and then leave it in place.[1] Patients should be instructed to soak the toe for 10 minutes 3 times daily for 1 to 2 weeks in 1 L of cold water mixed with 1 to 2 teaspoons of salt or Epsom salts. After each soak, patients should apply a mid- to high-potency topical steroid. Third, apply an anchor tape to the tip of the toe and around the nail vertically and longitudinally. The tape will pull the bulging tissue away from the nail plate and allow nail growth to proceed unimpeded. Additional surgical tape should be applied to affix the previous one to the nail plate and skin.[2]

In advanced cases, when granulation tissue, pain, and infection are present, treatment can be performed only after cure of the inflammatory reaction, which can be affected by using the soaking solution and regimen and by applying a mid- to high-potency topical steroid after each soak. After this treatment, 1 of 2 techniques can be performed using digital block anesthesia: gutter splint with formable acrylic resin[3] and phenolization.[4] The former technique requires elevating the ingrown nail spicule by inserting a longitudinally incised tube along the lateral margin of the nail plate. A formable acrylic resin should then be applied inside the tube and then upon the plate to hold the tube in place. The latter technique requires cutting out the ingrown spicule with an English anvil nail splitter and removing it. Then, ensuring a dry bloodless field, use Calgiswabs™ (urethral swabs with a small cotton tip and a metal handle that can be easily bent to match the shape of the groove housing the proximal matrix) to apply 88% phenol to the affected nail matrix 3 times (30 seconds each time); then thoroughly cleanse out the phenol with alcohol (Figure).

An electrode also can be used to perform electrodesiccation and curettage. One side is active, and the other side is Teflon® coated and is inactive. After surgery, a dressing consisting of bacitracin/polymyxin ointment, Telfa dressing, 4×4s, tube gauze, and then paper tape should be applied. Assure that the bandage is not too tight. Leave it on for 48 hours, elevating the digit as high as possible. The patient should then soak the digit with 1 teaspoon of salt or Epsom salts in 1 L of warm water, dry it off, and apply bacitracin/polymyxin ointment and a bandage. This should be done 3 to 4 times daily for 1 to 2 weeks. If infection is suspected, an appropriate oral antibiotic should be prescribed.

All patients should be cautioned to avoid wearing narrow-toed shoes, high heels, improperly fitting shoes, or stockings that are tight at the toe; avoid rounding toenails at the edges (they should be cut straight across); and see a physician as soon as possible when an ingrown nail first starts.

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