Ingrown toenail (cryptosis) is a common condition that many nurse practitioners see routinely. A growing consensus suggests that partial nail resection (PNR) in conjunction with chemical matricectomy is the most effective treatment for cryptosis.1

Selective matrix ablation, or partial matricectomy, artificially narrows the toenail permanently. In most cases, this restructuring provides a definitive solution to the cryptotic toenail.2 Performing a PNR without the matricectomy will not solve the problem. The nail will simply replicate its previous cryptotic condition, and the cycle of pain will begin again.

The goal of treatment is to relieve pain by resolving inflammation and infection and to prevent cryptosis from reoccurring. To achieve this, skillful reduction of the width of the ingrowing toenail is needed. An implied secondary goal is to perform this procedure in a way that will produce a cosmetically pleasing outcome.

This article summarizes my experience treating ingrown toenail in at least 300 patients. The photographs accompanying this article document some of these cases and were taken with each patient’s permission.

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Anatomy

The anatomy of the toenail is illustrated in Figure 1.

The nail advances predictably in a longitudinal direction owing to macroscopic ridges that correspond to grooves in the nail bed. The nail adheres to the matrix via the onychodermal band. This bond is best left undisturbed, so avoid removing the entire nail except under extenuating circumstances. If the entire nail is removed, it may not grow back in proper alignment. This conclusion is anecdotal, based on reports from patients and other providers.

The nychials create a protective seal around the matrix. The eponychium forms the proximal skin fold and overlies the nail root. To the lateral and medial margins are the paronychiums. A paronychia is simply an infected paronychium and does not necessarily indicate an ingrown toenail.3

Distally, the hyponychium forms a tight seal beneath the free edge; it also forms the fleshy tip of the dorsal toe. The hyponychium, like the other nychials, serves as a protective seal. If these structures are damaged by overtrimming or overt trauma, the nail bed becomes exposed and at risk for bacterial or fungal infection. Bacterial infection causes paronychia, while onychomycosis is a subungual fungal infection.

Figure 2 shows the foot of a man who self-managed his ingrown toenail by aggressively trimming. The diagnosis in this case was stage 3 onychocryptosis. A bilateral partial nail resection with selective matricectomy of the paronychial nail matrix resolved this problem.

Assessment

Begin the assessment with a complete health history. Of special concern are disorders that impair the vascular system, such as diabetes.4 If invasive intervention becomes necessary, the existence of vascu-