

# Essential Tools for Urgent Care— Finger Tourniquet

**Urgent message:** Use of a finger tourniquet can ensure a bloodless field when performing laceration repair to fingers and toes, thereby reducing risk for damage to underlying vital structures and increasing the prospects for positive outcomes.

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Having repaired scores of finger lacerations, I have learned there are a few essential supplies required for these cases, the most critical of which is the finger tourniquet. This simple device makes a world of difference.

We've all experienced how the fingers have a rich blood supply and can bleed profusely. Combined with the fact that so many patients are on agents that affect coagulation, the reason a finger tourniquet must be in your digital laceration tool kit should be clear. A field obscured by actively oozing blood creates a nearly impossible situation for fully evaluating the presence of joint capsule or tendon injury and foreign body. The "bloodless field" improves precision in repair and reduces risk of inadvertently damaging underlying vital structures or violating the joint capsule during repair.<sup>1,2</sup> While there are many commercial products available, other methods of tourniquet creation can be used with readily available supplies.

## Improvised Tourniquets

One improvised tourniquet approach is the *glove technique*. To perform this, have the patient put a glove on the affected hand, cut a small hole at the tip of the affected finger and roll the rest of the material down to the base of the finger while the fingers are pointed up. This will constrict the base of the finger, thereby acting as a tourniquet. (See **Figure 1**.)

As with commercially available products, the glove technique acts to exsanguinate the finger as the glove material is being rolled down. It also keeps the hand covered, reducing the risk of cross-contamination. Ensure an appropriate glove size is used so rolling the material down the finger does not generate too much pres-



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sure, potentially causing nerve injury.

Another method for an ad hoc tourniquet: use a standard IV tourniquet or the elastic band from the wrist of a disposable glove. To perform this technique, wrap the elastic material around the finger and hold it in place with a hemostat. See **Figures 2 and 3**.)

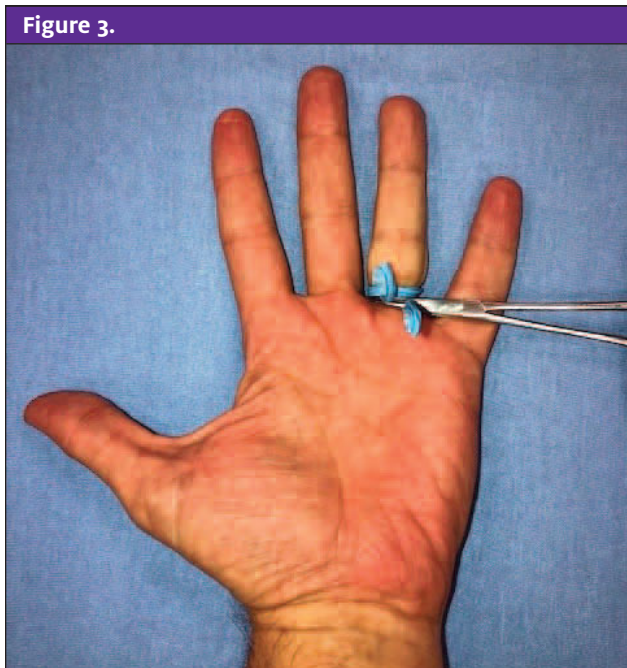
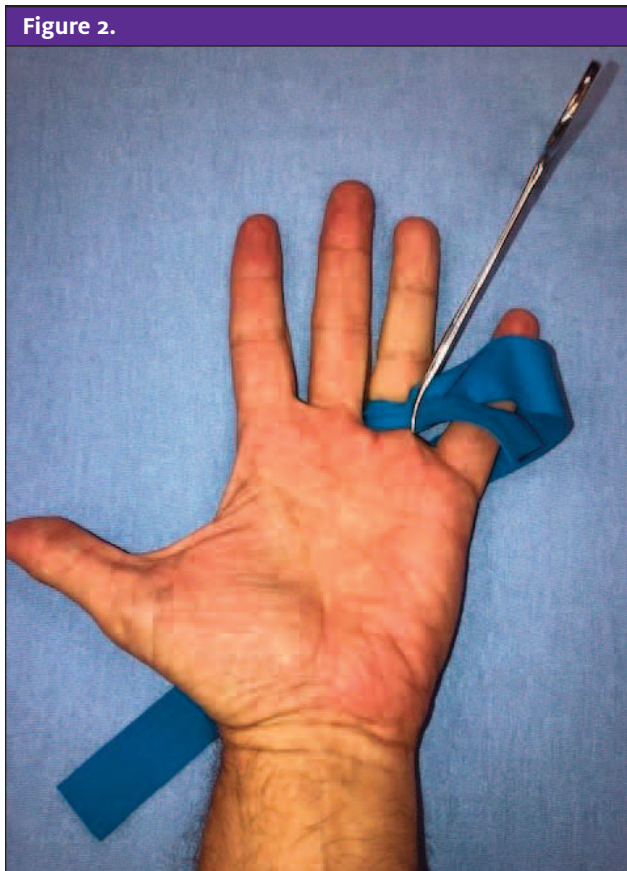
With a little practice, you can determine which technique is for you within your clinical setting.

## Tips

A digital block is best performed prior to tourniquet application, regardless of the method you use.

It's also important to push the tourniquet as prox-

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initially as possible (ideally to the base of the finger at the webspace). This will create a near-bloodless field, allowing for better visualization.

Once the repair is complete, make sure to remove the tourniquet promptly. Remarkably, there have been cases of patients being sent home after a finger procedure with the tourniquet left on, likely because the finger was anesthetized and a medical assistant dressed the wound. This leaves the finger at serious risk of irreparable ischemic injury.<sup>3,4</sup>

Furthermore, the amount of pressure generated by these devices and techniques can reach upwards of 600 mmHg—enough to cause significant nerve damage. You must be familiar with this and be sure to not use a device or technique that will lead to this potentially disastrous complication.<sup>5,6</sup> ■

**References**

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