

## Management of Fishhook Injuries

Hook extraction can be a relatively easy operation (although not totally painless). With hooks exceeding two inches on average lures, hook extraction becomes slightly more challenging. (See figure 1). The following are two methods to easily extract MOST COMMON embeddings. Please note that hooks located in the eye and other vitals should be treated by trained medical personnel.

Figure 1. (Hooks are shown actual size)



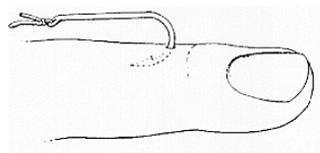
In most cases, fishhooks are lodged in one of the fingers with the head being a close second on the list of body areas most commonly hooked. This information is designed to show techniques for fishhook removal from non-vital structures near fresh water. This discussion only applies to fishhooks embedded in areas where a primary care physician would normally perform routine skin lesion excisions. Fishhook removal from areas such as the eyes, anterior neck, and in close approximation to known neurovascular bundles should be performed by the appropriate specialist.

### "PUSH THROUGH AND CUT OFF" METHOD

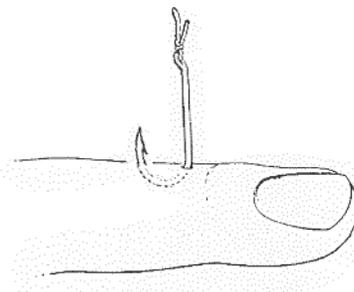
Technique 1 is the "push through and cut off" method. This method involves removing the hook by gripping the hook with needle nose pliers and advancing the hook through the tissue until the barb end of the hook penetrates through the skin at a separate location. The barb end of the hook is then cut off with a wire cutter, and the remainder of the hook is backed out through the entry site. (See figure 2) The main disadvantages of this method include damaging uninjured tissue and extending the contaminated field. This technique is also limited in its usefulness if the hook tip lies in deeper structures, which prevent advancing the hook (i.e. bone, ligament, tendon), or if advancing the hook would too closely approach a vital area.

Figure 2

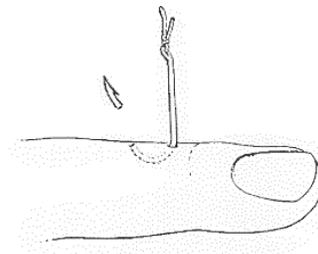
Injury



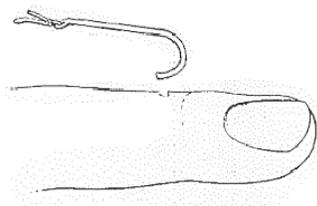
Advance hook



Remove barb



Back out hook

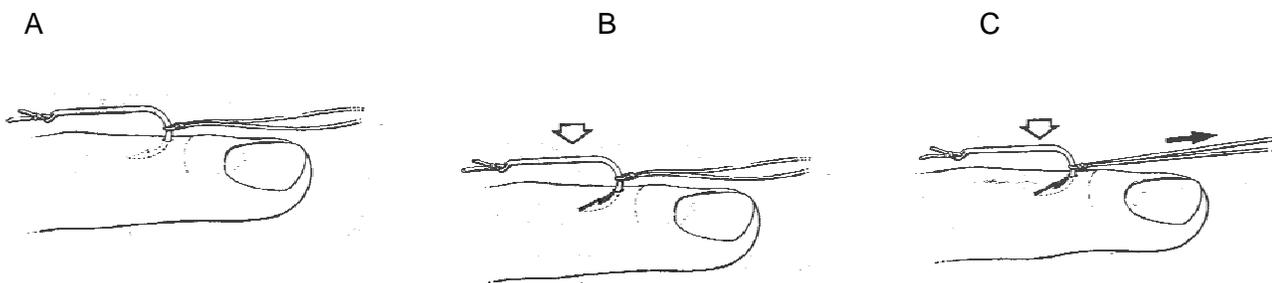


### STRING FLICK TECHNIQUE

A less well-known technique for removing fishhooks is used by commercial fishermen in New Zealand to remove hooks from themselves using only a piece of string. They use this method because it allows them to remove the hook, dip the finger in the sea, and carry on fishing within a minute (see figure 3).

- A. A piece of strong string/suture is tied to the bend of the hook.
- B. The shank of the hook is depressed to disengage the barb.
- C. While the shank is being depressed (downward), the string is given a hard, sharp, decisive jerk in the direction in which the hook entered the skin. This extracts the hook along the path of entry.

Figure 3



Since its initial description, this string technique has become the preferred method of fishhook removal for many emergency medicine and family physicians. Some have proclaimed that all you need is a length of string and nerves of steel, deferring the use of local anesthetic. Several people state that when the technique is performed correctly, it is "painless". However, when available, local anesthetic is recommended.

The major benefits of the string removal method include minimizing the size of the wound, and limiting infection. The string method usually does not enlarge the wound track or extend the point of entry if the barb of the hook has been properly disengaged with downward pressure on the shank of the hook. It is also recommended that you cut away the excess hooks (those not embedded) from a lure before yanking on it with a string.

Once the fishhook has been successfully removed, by either method, the wound should be thoroughly irrigated and cleaned. Washing the wound in the lake is NOT recommended because of the potentially serious pathogens that inhabit nearly all bodies of fresh water.