

# Aquatic Antagonists: How to Surgically Remove a Fishhook

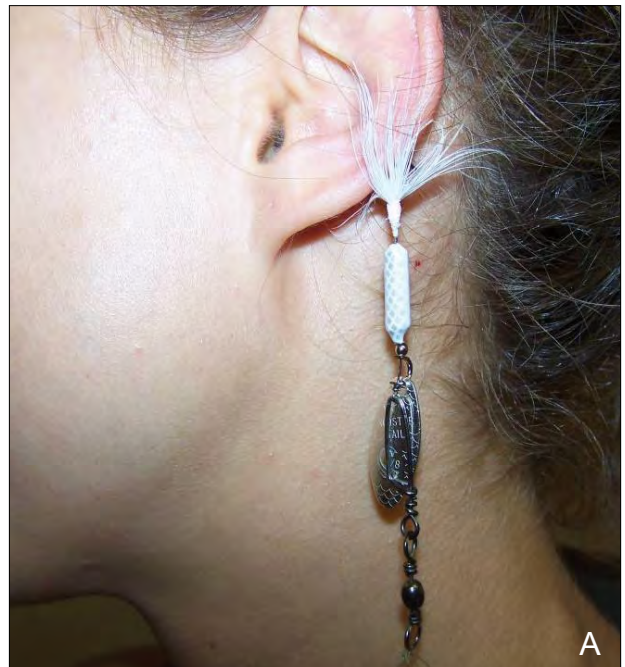
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**F**ishhook embedment is not an uncommon occurrence (Figure) and surgical intervention often may be needed to remove the hook. If one is familiar with the different techniques for easy removal, then the foreign object can be removed quickly with minimal damage to the surrounding tissue.

There are 5 basic techniques that can be used depending on the depth of embedment, the location, and the type of hook. It is important to evaluate the hook before using any of these techniques so that one is aware of the number of hooks and if it is barbed. Assessment of the type of hook is critical for properly selecting the best method for extraction. The fishhook removal techniques to be considered and discussed include the simple retrograde, string-yank, needle cover, advance-and-cut, and cut-it-out techniques.<sup>1,2</sup>

The simple retrograde technique can only be used to remove a barbless hook. It requires placing downward pressure on the shank of the fishhook while pulling it out along the point of entry. It is important not to use this method if the fishhook has a barb or involves deep tissue because the fishhook can become further embedded or the surrounding tissue can become damaged.

The string-yank technique is used to remove fishhooks that are wedged into a part of the body that is fixed and can offer resistance when attempting to remove it. A silk suture (or fishline) is wrapped



Frontal view (A) and posterior view (B) of a fishhook embedded in the postauricular region.

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around the fishhook; the suture ends can be wrapped around a tongue depressor or pencil to allow for better control. Downward pressure is then applied to the fishhook while the string is quickly pulled.

The needle cover technique is another method used to remove barbed fishhooks that are superficially embedded in the skin. An 18-gauge needle (bevel down) is advanced along the same opening as the fishhook entry point. It is important that the beveled side is advanced downward to be able to detach the barb from the underlying skin and then keep it covered while reversing the hook and needle out through the original entry point.

The advance-and-cut technique also is preferably used for more superficial embedment of barbed fishhooks. A hemostat or needle driver is used to grasp the shank of the hook and advance it forward until the tip and barb emerge through the skin, at which point pliers are used to remove the barb. The hook

is then reversed out of the skin through the original entry point.

Lastly, the cut-it-out technique is the most aggressive and can be used to remove deeply embedded barbed fishhooks. This technique requires a stab incision with a No. 11 blade that extends from the entry site to the tip of the hook. The fishhook is then removed via retrograde pull.

After removal of the fishhook, it is important to irrigate the site and assess, based on clinical appearance and history, if the wound is dirty and requires antibiotic prophylaxis. The status of tetanus immunization history also should be determined.

### REFERENCES

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2. Thommasen HV, Thommasen A. The occasional removal of an embedded fish hook. *Can J Rural Med*. 2005;10:254-259.



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