Clinical Practice Procedures: Trauma/Fish hook removal

Policy code	CPP_TR_FHR_0120
Date	January, 2020
Purpose	To ensure a consistent procedural approach to fish hook removal.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
Review date	January, 2023
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

Fish hook removal

Fish hook related injuries occur in both recreational and commercial fishing settings. There are many different types of fish hooks, varying in size and the number of barbs present. Most fish hook injuries penetrate only the soft tissues of the hand, face, head or upper extremities but can lodge in any body part or result in deep tissue penetration.

Parts of a fish hook
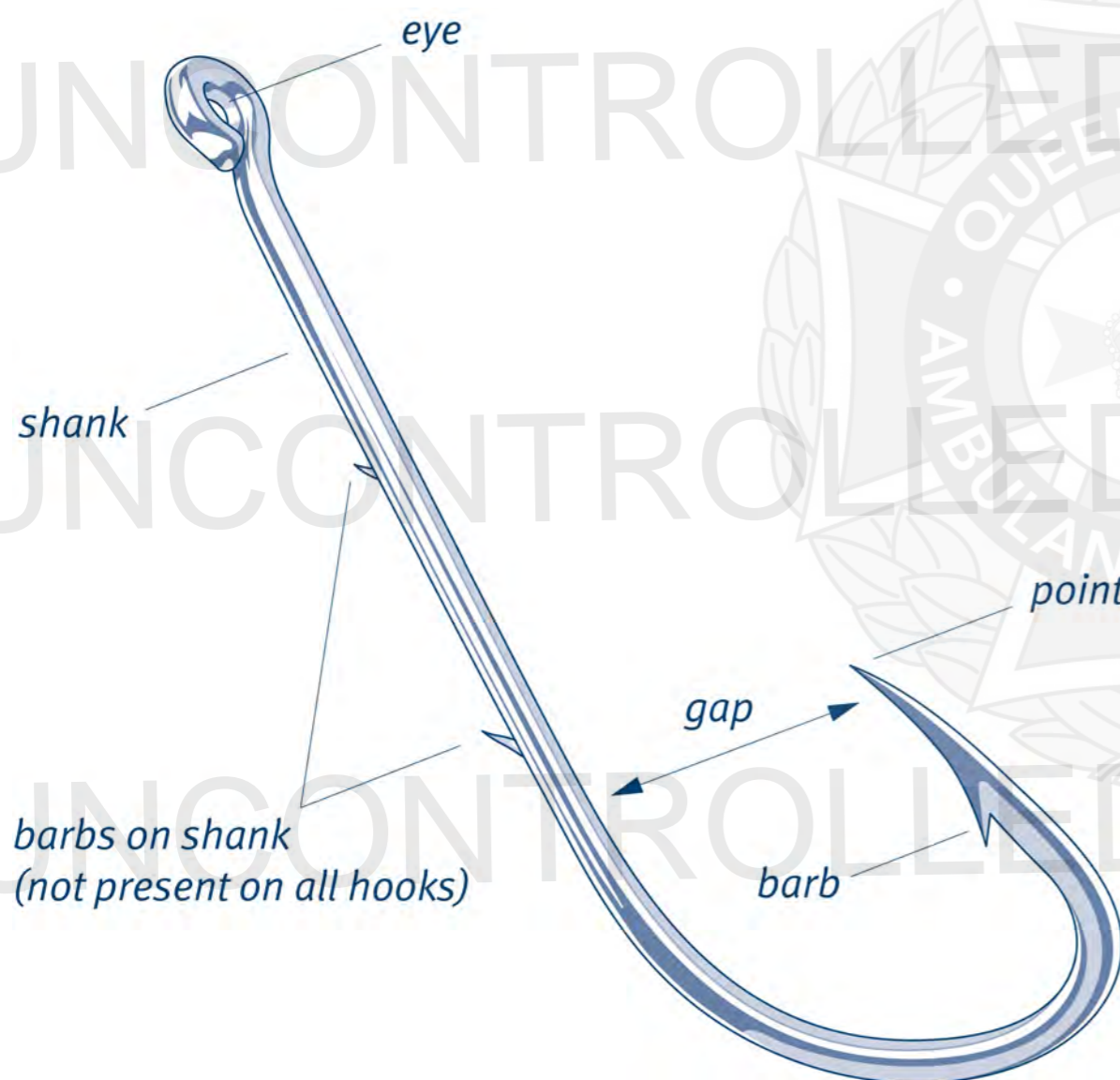
Indications

- Soft tissue embedded fish hook[1]

Contraindications

- Fish hook embedded in the eyes, genitals, face or neck.
- Any fish hook injury that involves bone, joints, tendons or nerves.

Complications

- Pain
- Localised swelling
- Haemorrhage

Before attempting removal

- Remove unnecessary fishing line, bait and lure parts from the embedded hook

- Cover or remove all unprotected barbs and hooks

- Determine the size and type of hook, and the presence or absence of barbs

- Clean the site with an appropriate antimicrobial swab.

- Consider lidocaine 1% (lignocaine 1%) and if required inject subcutaneously around the wound site *(only if trained and authorised)*.

Removal of hook

1. ***Retrograde technique A*** – For barbless and superficially embedded hooks
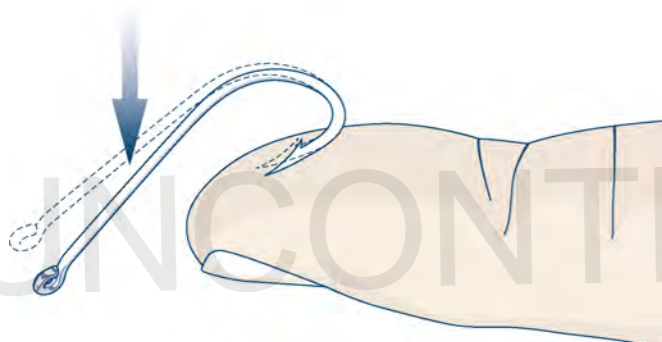
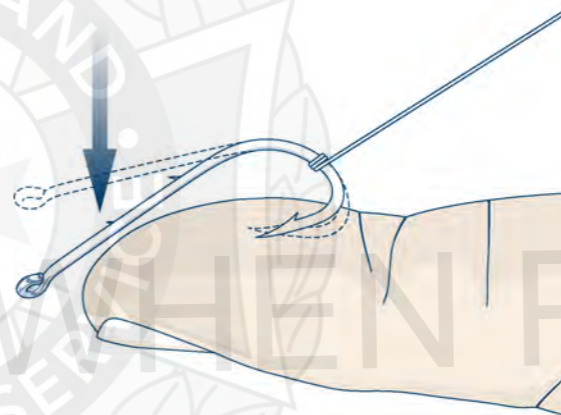a) Apply slight downward pressure to the shank of the hook to disengage the barb (if present) from the tissue.
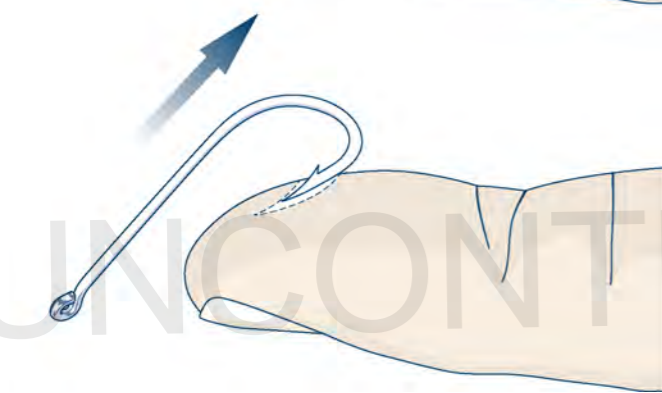
b) Remove hook along path of entry, out through the original wound.

Note: *If any resistance or catching of the barb occurs, stop and consider other removal techniques.*

2. ***Retrograde technique B*** – For small and medium sized hooks. Do not perform this technique on a body part that is not fixed (e.g. earlobe, nostril).
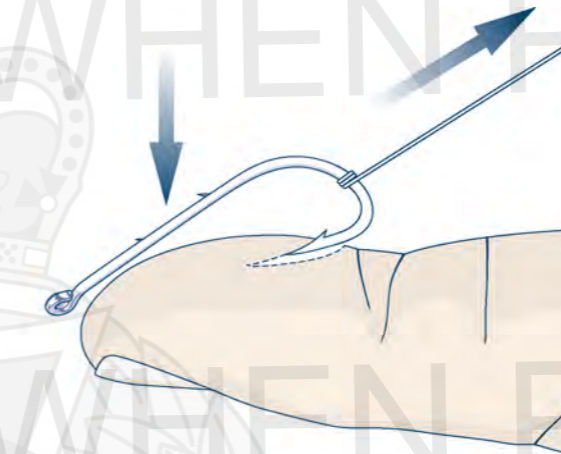
a) String or fishing line is wrapped 2–3 times around the mid-point of the bend in the fish hook.

b) Apply slight downward pressure to the shank of the hook to disengage the barb from the tissue and stabilise the hook against the skin surface.
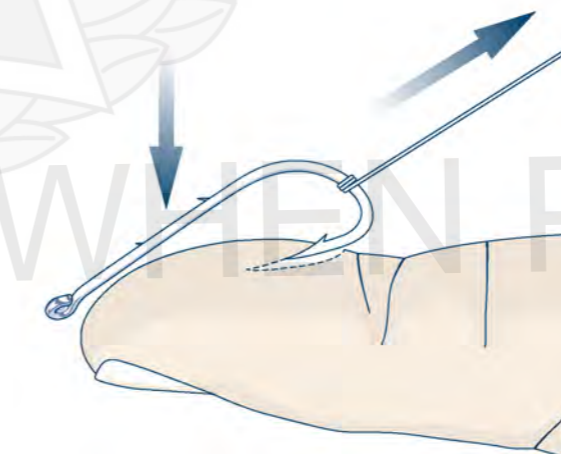
c) Ensure a tight grip on the string with no slack in the line.

d) At a 30 degree angle, quickly and forcefully pull the string away from the skin to remove the hook.

3. *Cut or squash technique* – only for injuries where the point of the hook has pushed out through the skin, whether with single or multiple barbs.
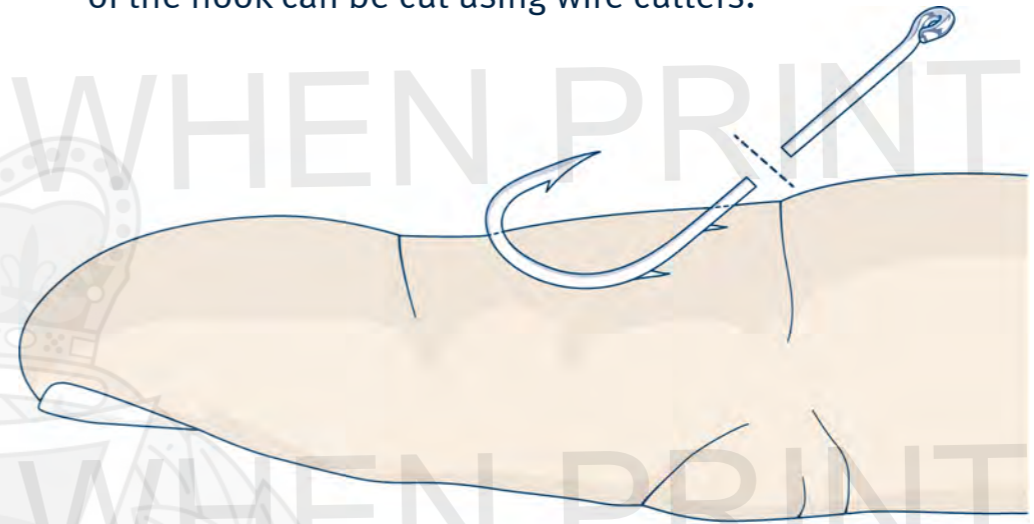
- SINGLE BARB – a) If only a single barb is present on the end of the hook the barb can either be cut off using wire cutters or squashed flat using pliers.
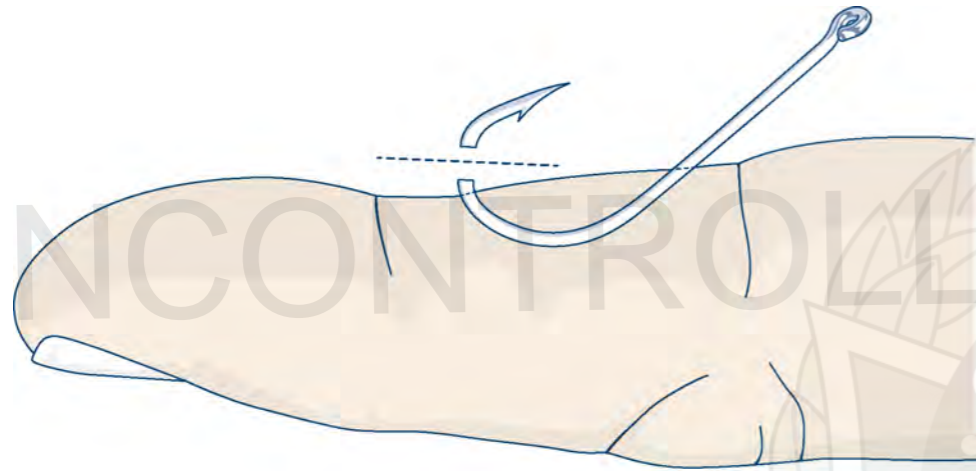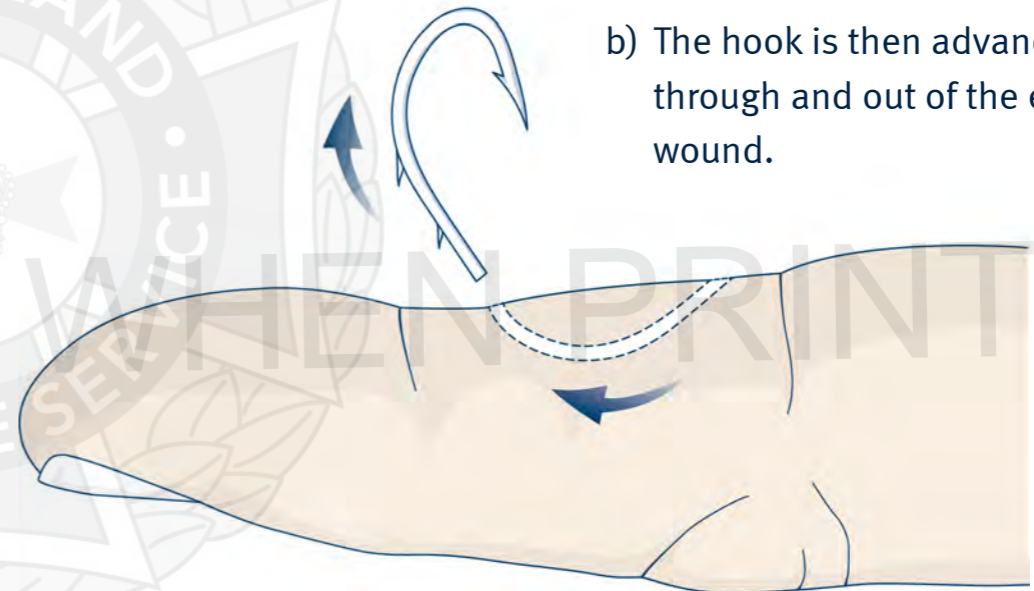
b) The hook is then removed back through the entry wound.
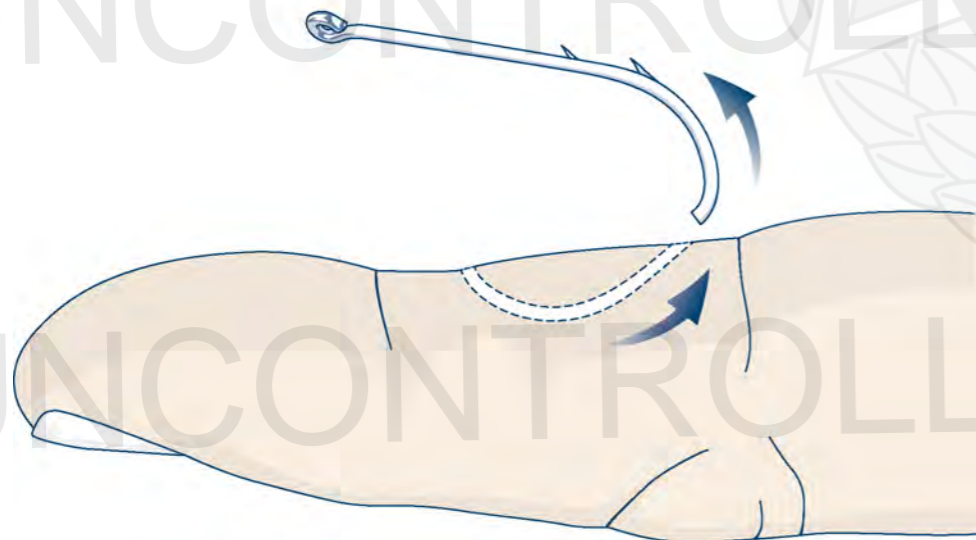
- MULTIPLE BARBS – a) If multiple barbs are present the eye of the hook can be cut using wire cutters.

b) The hook is then advanced through and out of the exit wound.

Following removal

a) Clean the wound site

b) Cover with appropriate dressing

c) Provide the patient with appropriate wound care instructions

d) Advise the patient it is mandatory to contact their doctor within 24 hours to arrange a wound review and check potential tetanus immunisation requirements.

➕ Additional information

- If any uncertainty regarding the involvement of deeper tissues or ability to safely remove the hook; leave it in place, stabilise and transport/refer patient to an appropriate facility.

- It is important to actively look for potential tendon or joint involvement. Proximal involvement of tissues near these structures should prompt a high index of suspicion.

- Fish hooks are often contaminated by multiple microorganisms which can result in tetanus toxicity or infections.

- Grossly contaminated wounds, immunocompromised patients and old wounds presenting with signs of infection should be **immediately** referred for further assessment at an appropriate medical facility.