



Clinical Practice Procedures: Other/ Emergency removal of restrictive digit rings or bands

Policy code	CPP_OT_ERRR_o822
Date	August, 2022
Purpose	To ensure a consistent procedural approach to the emergency removal of restrictive digit rings or bands.
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%
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Review date	August, 2025
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

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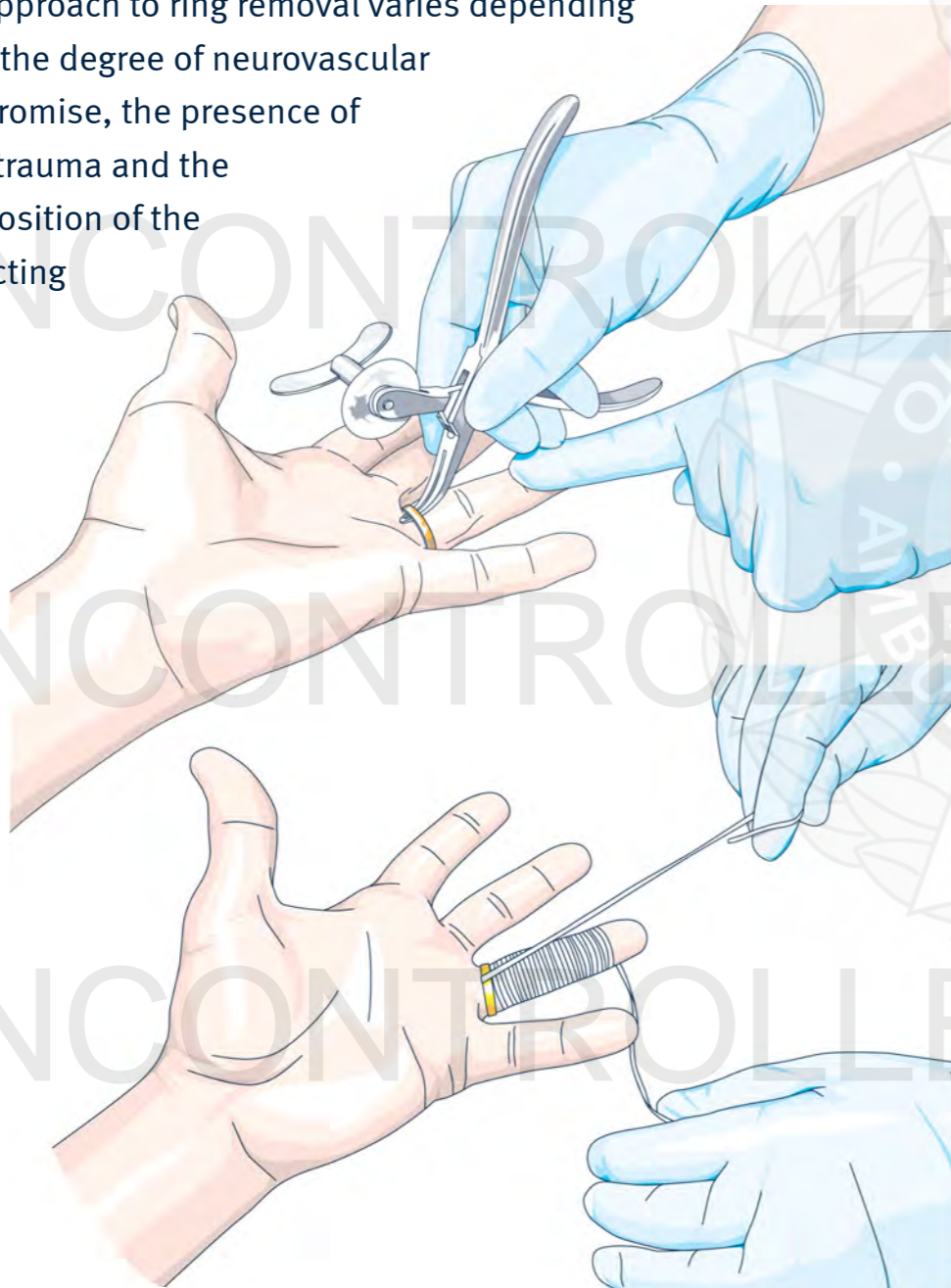
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Emergency removal of restrictive digit rings or bands

August, 2022

Digit entrapment from rings or bands following localised trauma, infection and allergy are common presentations to emergency departments. If not promptly removed, this can result in digit ischaemia and tissue necrosis.

The approach to ring removal varies depending upon the degree of neurovascular compromise, the presence of local trauma and the composition of the restricting band.



Indications



- To manage or prevent the tourniquet effect of entrapped rings and bands when associated with:
 - Signs of digit ischemia; **AND/OR**
 - Open wound **AND/OR** deformity suggesting fracture or dislocation.

Contraindications



- Non-consenting patients

Complications

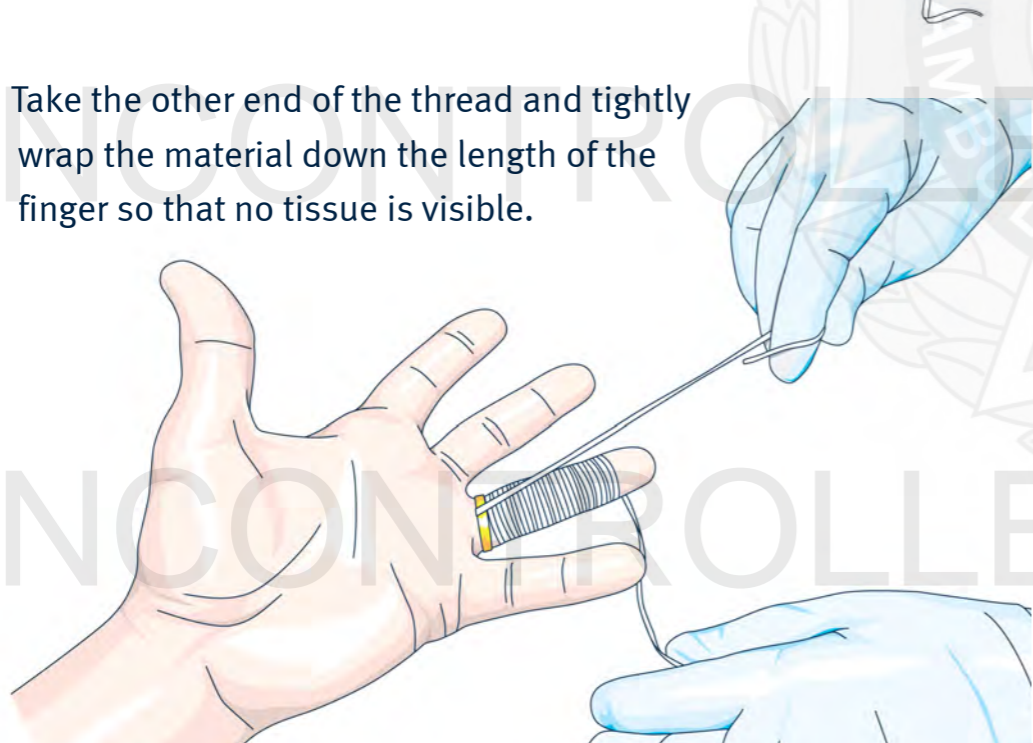
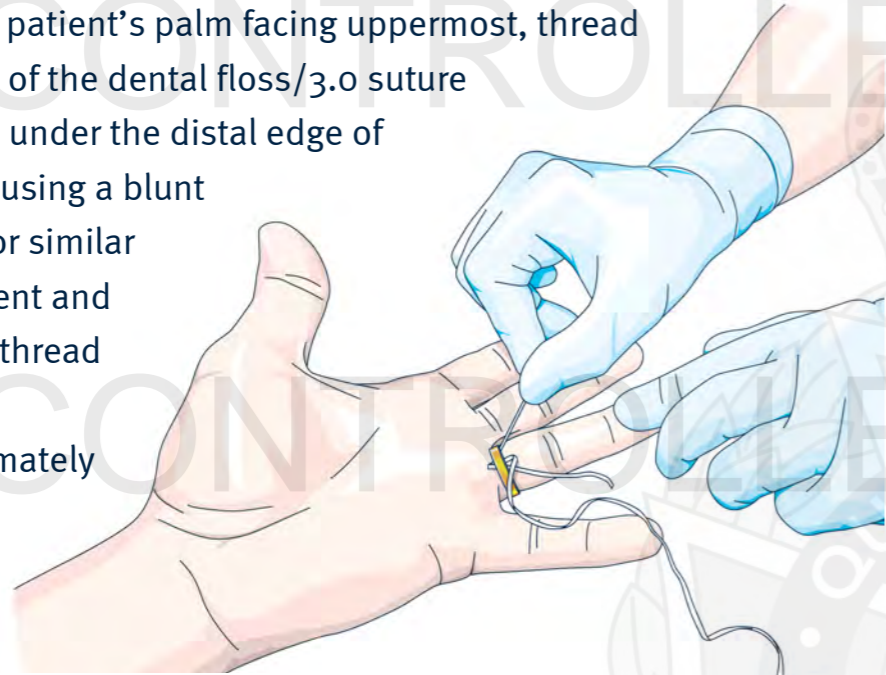


- Iatrogenic injury

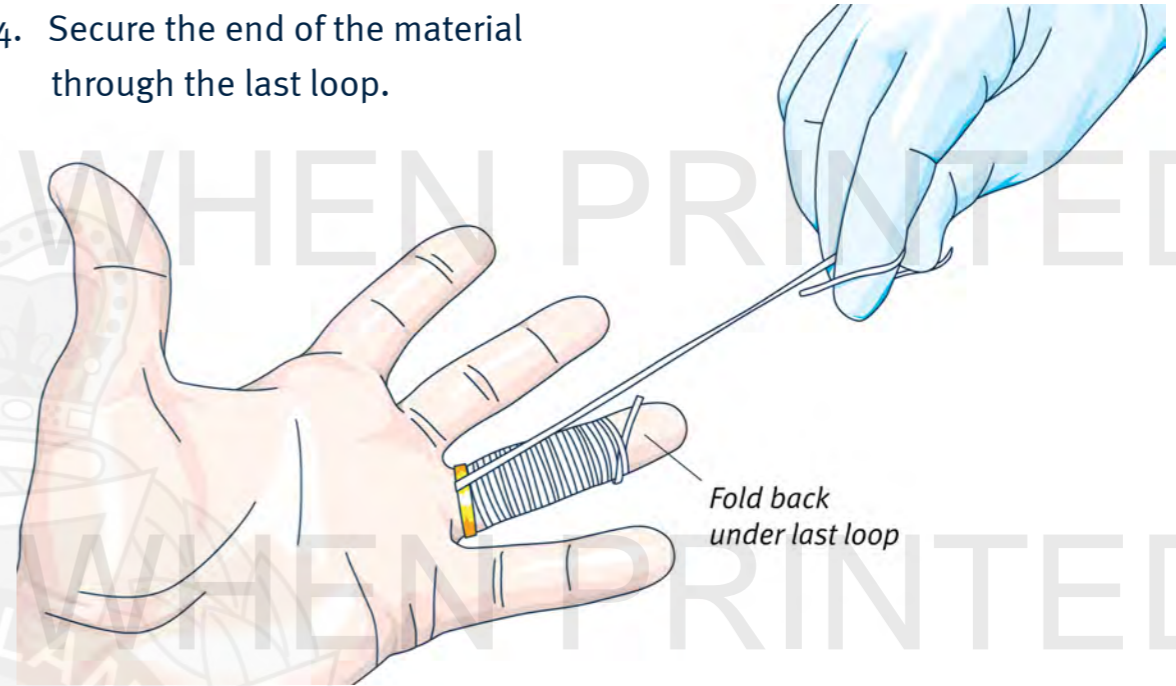
Procedure – The emergency removal of restrictive digit rings or bands

Procedure – String wrap technique^[1] (option 1)

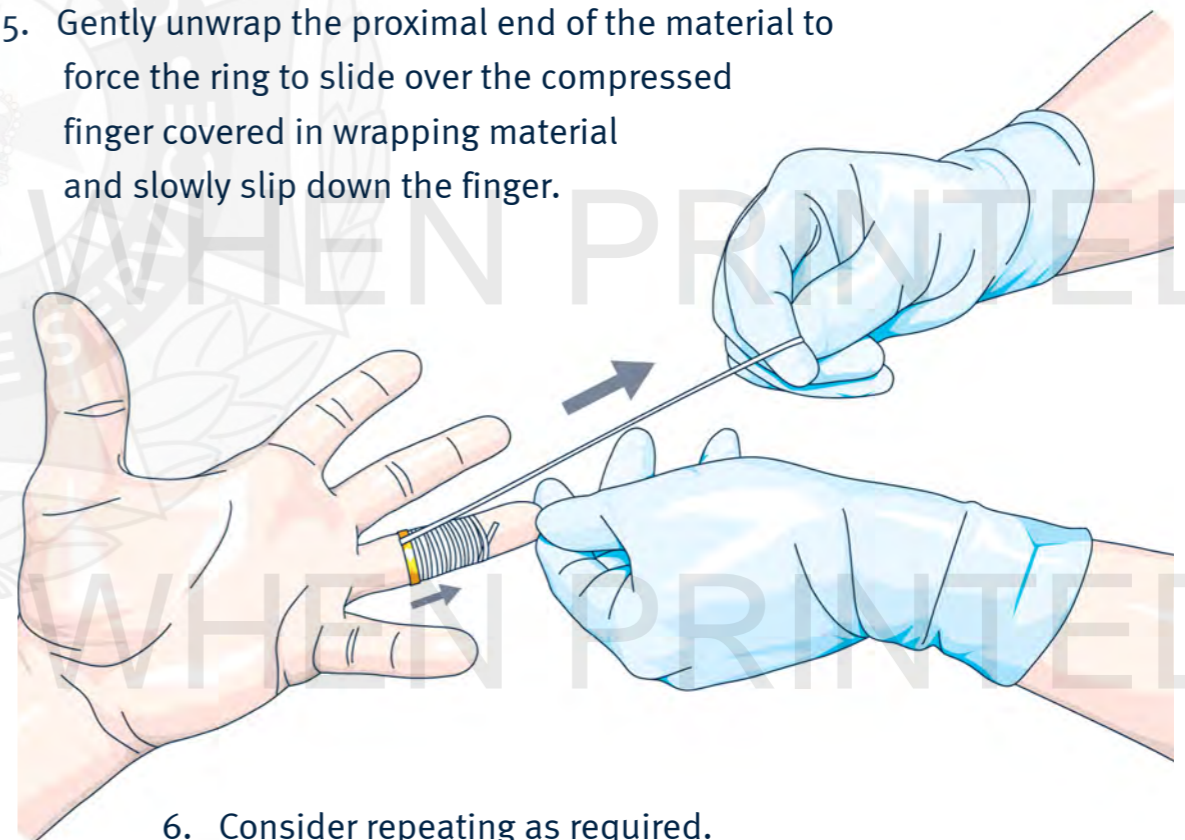
1. Lubricate the digit with water soluble lubricant.
2. With the patient's palm facing uppermost, thread one end of the dental floss/3.0 suture material under the distal edge of the ring using a blunt needle or similar instrument and pull the thread through approximately 10 cm.
3. Take the other end of the thread and tightly wrap the material down the length of the finger so that no tissue is visible.



4. Secure the end of the material through the last loop.



5. Gently unwrap the proximal end of the material to force the ring to slide over the compressed finger covered in wrapping material and slowly slip down the finger.

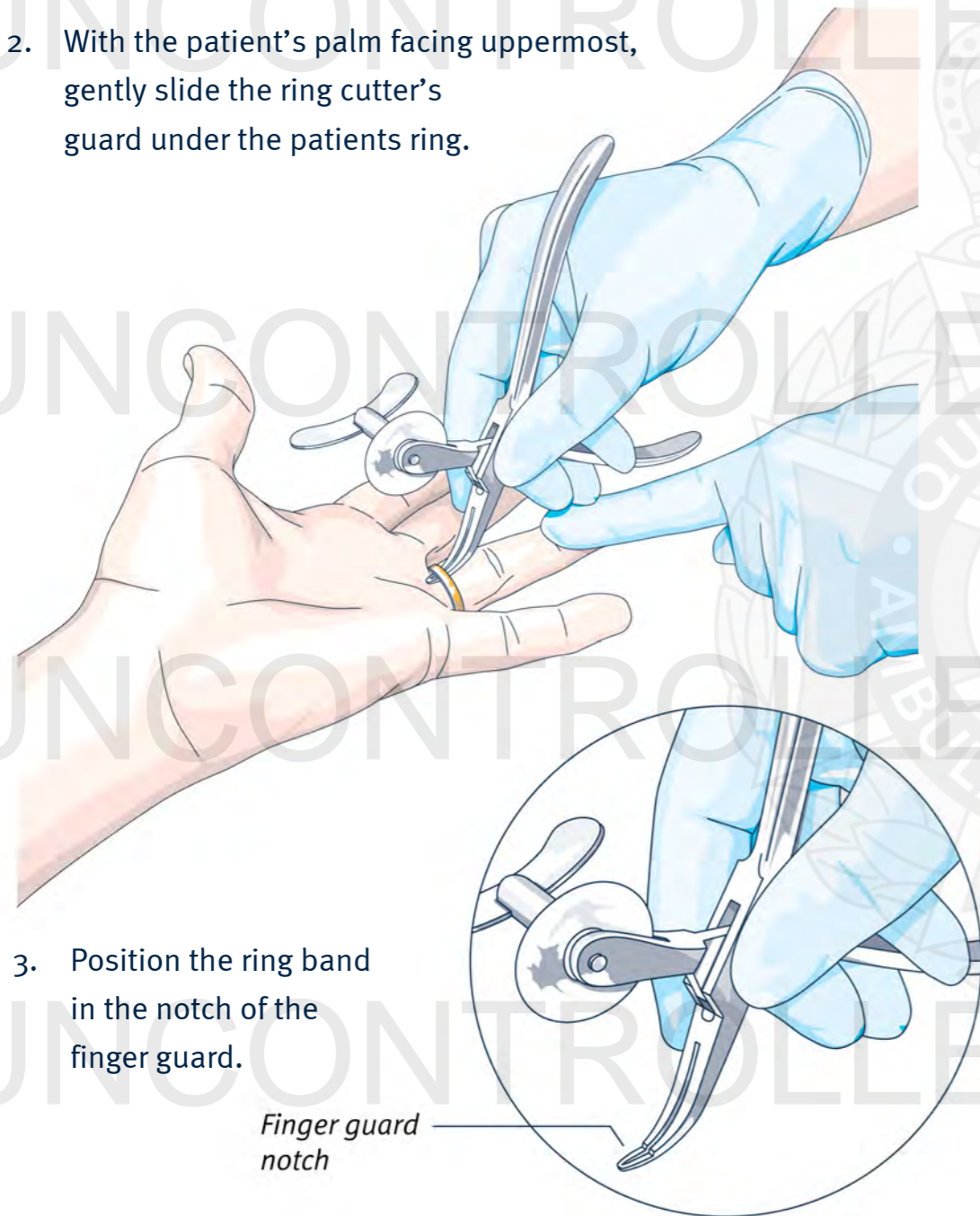


6. Consider repeating as required.

Procedure – The emergency removal of restrictive digit rings or bands

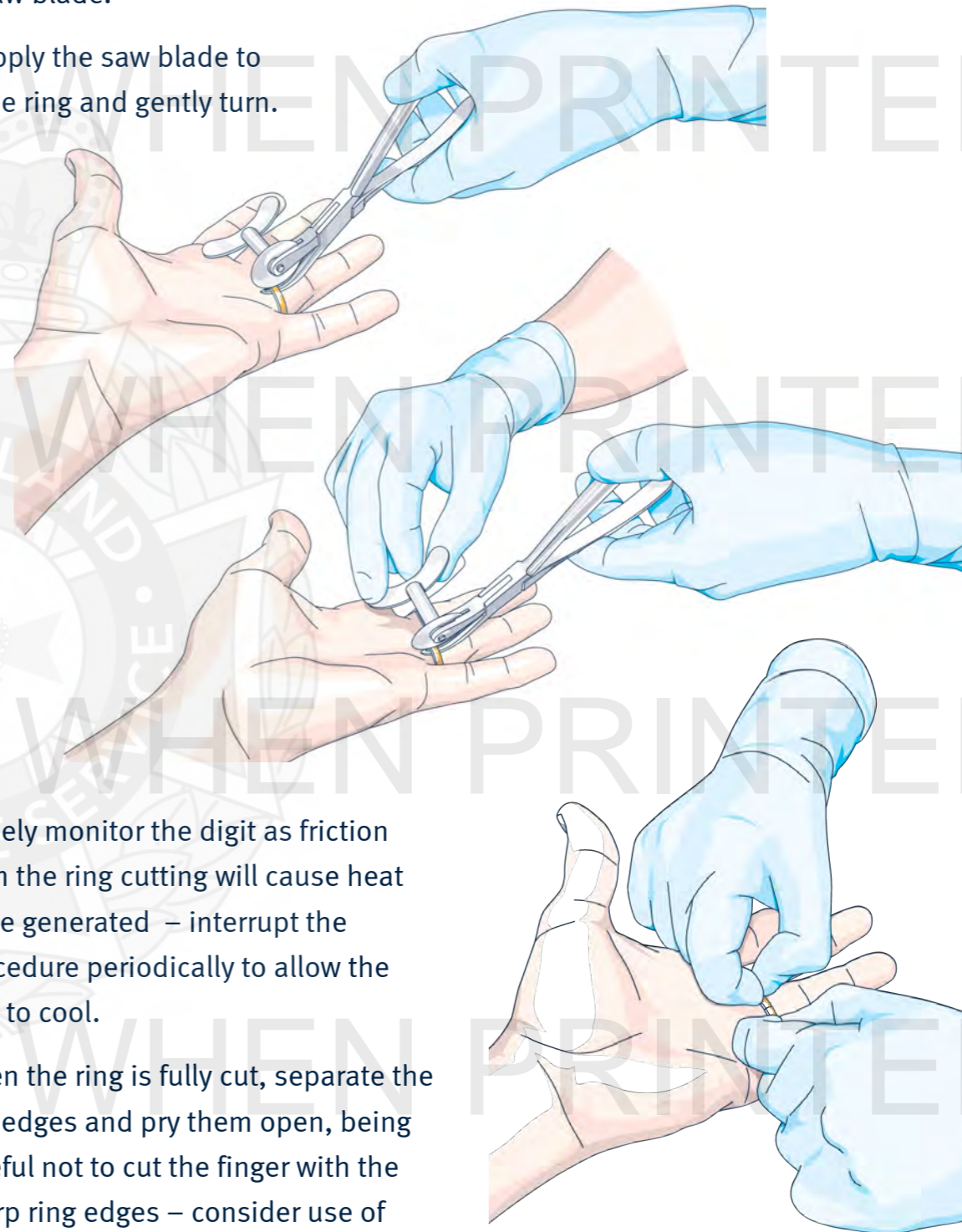
Procedure – Ring cutter^[2] (option 2)

1. Cover any open wounds to prevent ring filings from entering and causing foreign body reactions.
2. With the patient's palm facing uppermost, gently slide the ring cutter's guard under the patients ring.



4. If possible, rotate the ring so that the thinnest part is located under the saw blade.
5. Apply the saw blade to the ring and gently turn.

6. Closely monitor the digit as friction from the ring cutting will cause heat to be generated – interrupt the procedure periodically to allow the ring to cool.
7. When the ring is fully cut, separate the two edges and pry them open, being careful not to cut the finger with the sharp ring edges – consider use of disposable suture needle holders.



Additional information

- Non-destructive ring removal methods should be considered first in all situations.
- The ring cutter is a re-usable medical instrument that requires cleaning in accordance with the *QAS Infection Control Framework*.
- The ring cutter is designed to cut softer metals such as gold or silver and may be ineffective for cutting hard metals such as tungsten or titanium. Where appropriate, clinicians should consider requesting QFRS assistance for urgent removal of hard metal bands, but if this option is not available, the patient must be transported to hospital for ring removal.
- The history of trauma increases the likelihood of associated fracture, dislocation or trauma.
- The ambulance clinician should always balance the pre-hospital removal of a restrictive ring or band against the patient's greater clinical needs.
- All staff are required to use Tamper Evident Bags to secure any removed jewellery during transport – if possible the jewellery should remain in the possession of the patient at all times.

