

ORTHOPAEDICS



FOR PRIMARY
HEALTH CARE



LION

LEARNING INNOVATION VIA
ORTHOPAEDIC NETWORKS

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Slings

by Duncan McGuire

Learning objective

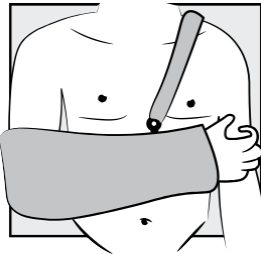
1. Understand the basic types of slings used for upper limb injuries.

Introduction

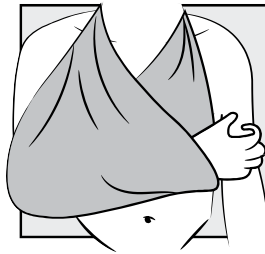
There are three types of slings used for upper limb injuries in orthopaedics:

1. Shoulder immobiliser
2. Collar and cuff
3. Broad arm sling

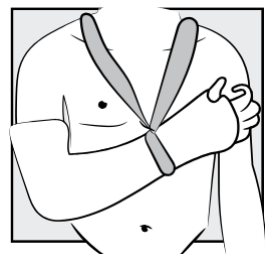
When applying, position the elbow in the corner of the shoulder immobiliser. Ensure that the strap at the back of the neck is adequately padded so that the sling is comfortable. For a properly positioned sling, the forearm should be in a horizontal position parallel to the ground when standing.



Broad arm sling



Triangle sling



Collar and cuff

Shoulder immobiliser

This is most commonly prescribed after an injury or surgery to a shoulder or an elbow. The shoulder immobiliser comes pre-packaged in various sizes. The part of the sling that the forearm rests in is made of material and it encloses the forearm with velcro straps. There is a strap that extends from the forearm component around the neck and back onto the forearm component. There is an optional strap that goes around the body to prevent the arm moving away from the body. This strap is usually only used when the intention is to not allow shoulder abduction.

Collar and cuff

The collar and cuff is made from sponge. It has a loop that goes around the neck and another loop through which the hand passes. The arm is supported with the wrist resting in the loop. The loop around the wrist should be loose enough that the patient is able to put in and take out their hand themselves.

The collar and cuff is very easy to apply and is cheaper than the shoulder immobiliser. It does not support the elbow, so in certain conditions where elbow support is required, the shoulder immobiliser may be better. Examples of this

include clavicle fractures and acromioclavicular joint injuries. The collar and cuff is ideal for conditions where there is a plaster of Paris cast, brace or bulky bandage around the upper arm or elbow, where the bulkiness would interfere with the elbow fitting into the shoulder immobiliser. Examples include humerus fractures that are immobilised in a U-slab and where there is a bulky bandage around the elbow following surgery.

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ABOUT THE BOOK

Informed by experts: Most patients with orthopaedic pathology in low to middle-income countries are treated by non-specialists. This book was based on a modified Delphi consensus study* with experts from Africa, Europe, and North America to provide guidance to these health care workers. Knowledge topics, skills, and cases concerning orthopaedic trauma and infection were prioritised. Acute primary care for fractures and dislocations ranked high.

Furthermore, the diagnosis and the treatment of conditions not requiring specialist referral were prioritised.

* Held et al. Topics, Skills, and Cases for an Undergraduate Musculoskeletal Curriculum in Southern Africa: A Consensus from Local and International Experts. JBJS. 2020 Feb 5;102(3):e10.

THE LION

The Learning Innovation via Orthopaedic Network (LION) aims to improve learning and teaching in orthopaedics in Southern Africa and around the world. These authors have contributed the individual chapters and are mostly orthopaedic surgeons and trainees in Southern Africa who have experience with local orthopaedic pathology and treatment modalities but also in medical education of undergraduate students and primary care physicians. To centre this book around our students, iterative rounds of revising and updating the individual chapters are ongoing, to eliminate expert blind spots and create transformation of knowledge.

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This textbook is not intended as a substitute for the medical advice of physicians. The reader should regularly consult a physician in matters relating to his/her health and particularly with respect to any symptoms that may require diagnosis or medical attention.

The information in this book is meant to supplement, not replace, Orthopaedic primary care training. The authors, editor and publisher advise readers to take full responsibility for their safety and know their limits. Before practicing the skills described in this book, be sure that your equipment is well maintained, and do not take risks beyond your level of experience, aptitude, training, and comfort level.

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