Limb reconstruction and lengthening
Russian technique
Ilizarov frame
Taylor spatial frame

Stock required
- Dressing pack.
- Topper pre cut gauze (you will be able to dress two pins per packet).
- Alcohol swabs (a few more than the number of pins).
- Clean scissors (two if cutting off old bandages).
- Sterile gloves.
- Non-sterile gloves.
- Alcoholic chlorhexidine (0.5% in 70% alcohol).
- 5cm Handyband bandages × 3 (Figure 1).

Procedure
- Wash hands.
- Open all sterile stock to be used (including alcohol swabs).
- Moisten Toppers with chlorhexidine.
- Discard any used forceps.
- Remove bandages using unsterile gloves (and one pair of scissors if needed).
- Push rubber bung to top of wire (Figure 2).

Figure 2
- Remove old Toppers.
- Wash hands and apply sterile gloves.
- Wring out Topper until damp.
- Clean each pin site with a separate alcohol swab. No attempt is made to remove scabs/crusts from skin. These will fall off when ready (Figure 3).

Figure 3
- Dress each pin site with the Topper dressing.
- Push the rubber stopper down firmly to the dressing (Figure 4).
• The rubber stopper assists in keeping the dressing in place, and also providing pressure to prevent skin hypertrophy.

• Bandage pins in groups of 2 or more. The purpose of the bandaging is to maintain a firm tension against the skin to prevent skin hypertrophy and movement of skin around pin sites (especially a problem if pin site is in a large muscle mass).

• Start to bandage the dressing by enveloping as much of the Topper as possible. Wrap around a couple of times, then bandage through the centre of the wires in a figure of 8 fashion (Figure 5).

Figure 5
• If pin site is in a large muscle mass, bandaging must continue up from the pin site to the ring of the frame.

• Tuck the edges of the bandages into the dressing bulk, or use tape to secure (Figure 6).

Figure 6
• NOTE: if the pin site is gaping, moist or inflamed, Allevyn (or another foam dressing product) can be used. Cut into a keyhole dressing like the Topper, but do not soak in chlorhexidine.

• Secure to skin by taping down, and bandage as per usual.

Problems or queries
Limb Reconstruction Service,
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Phone: (03) 9345 7027
Monday and Wednesdays – Fridays.
Leave a message on answering machine if there is no answer.
If you have an urgent query, page the orthopaedic registrar or the limb reconstruction fellow through the hospital switchboard, on (03) 9345 5522.

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