Long-Leg Cast Lifter

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Heavy long-leg casts are a nuisance during transfers, especially during acute hospitalization.

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Patients usually require assistance to lift and maneuver the casted leg, due to the insufficient strength of the hip flexors and pain upon active motion following trauma and immobilization of the lower extremity. This simple device, used by more than 20 patients over the past year, has in some cases shortened hospitalization time when ADL independence was required for discharge to home. The cast-lifter allows the patient to maneuver long-leg casts easily; it requires minimal strength because of its long lever arm; and it is attached to the cast for constant availability.

Materials and Fabrication

Materials needed are: Cotton webbing, 2.5-cm (1-inch) width; small rivets; Velcro or Scotchmate (1) fas-
tener, 2.5-cm (1-inch) width pile and hook: and plaster strips, 5-cm (2-inches) width.

Begin by determining length of webbing strip: measure from top of cast to posterior heel, and add 60cm (2 feet). Make loops at each end of webbing strip, using rivets: one loop to fit over foot at mid longitudinal arch, and one to fit in patient’s hand. When foot loop is in place, hand loop should be at top of cast and within patient’s reach (Figure 1).

Next, use rivets to attach a 10-cm (4-inch) strip of pile fastener to outside of hand loop. Attach a corresponding strip of hook fastener to the top of the cast with 12.5-cm (5-inch) strips of plaster, which have been dipped in warm water, and “frame” the fastener strip by overlapping edges and rubbing well (Figure 2).

Finally, use rivets to attach a 10-cm (4-inch) strip of pile fastener to the inside of the foot loop; attach a corresponding strip of hook fastener to the plantar surface of the casted foot using strips of plaster (Figure 3).

REFERENCE

1 Scotchmate is a 3M product