

The occasional short-arm cast

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CJRM 2000;5(3):146-48.

This commonly applied cast is suitable for a Colles' fracture or any similar fracture involving the lower radius or ulna.

1. Prepare the necessities ([Fig. 1](#)):

- 50-cm length of 5-cm stockinette for women, or 50-cm length of 7.5-cm stockinette for men
- 1 roll of 7.5-cm or 1 roll of 10-cm cast padding
- 3 rolls of 7.5-cm Gypsona plaster bandage
- Pail of water at room temperature (20° to 25°C), scissors and shears.



Fig. 1

2. Flex the elbow to 90°. Most people find it easier to work with the thumb pointing at them. Apply the stockinette and double it back over itself at the elbow end for about 7.5 cm ([Fig. 2](#)).



Fig. 2

3. Apply cast padding. Start at the wrist ([Fig. 3](#)) and spiral your way down toward the metacarpals, allowing each turn or layer to overlap previous turn by 50%. Continue spiralling toward the elbow.



Fig. 3

4. For added comfort make a small flange at the elbow end. Fold in half transversely a piece of torn-off cast padding long enough to encircle the upper forearm ([Fig. 4](#)).



Fig. 4

5. Dip a roll of Gypsona plaster bandage into the water for 3-5 seconds, until bubbling ceases. Remove from water and squeeze the roll (gently) twice. For the first plaster roll, start with 3 circumferential turns at the wrist ([Fig. 5](#)), then proceed distally toward the fingers. Wrap roll twice around the hand, "fanning" through the thumb web space to avoid excess plaster build-up ([Fig. 6](#)).



Fig. 5



Fig. 6

6. Extend the plaster only to the distal palmar crease (a common error is to extend the plaster too far down the palm) and then spiral upward, overlapping by 50% each previous turn of the plaster and ending about 5 cm below the condyles of the humerus ([Fig. 7](#)).



Fig. 7

7. Dip the second roll of plaster into the water. For the second plaster roll, start at the elbow end ([Fig. 8](#)), then spiral toward the hand, again applying 3 turns around the wrist for further reinforcement and one final turn through the web space. Wet your hands as necessary and then mould, using the gentle pressure of both palms ([Fig. 9](#)). If the fracture has been displaced you will usually want to mould in some palmar and ulnar deviation.



Fig. 8



Fig. 9

8. Before applying the third plaster roll, fold the proximal and distal ends of the stockinette down over the second roll of plaster ([Fig. 10](#)). Dip the third roll of plaster into the water. Apply the plaster roll at the elbow. Work distally ([Fig. 11](#)) and apply another turn around the hand. Again, be sure the distal palmar crease is exposed.



Fig. 10



Fig. 11

9. Finally, wet and smooth the cast as necessary. Take special care to smooth the cast edges around the thumb and hand to avoid irritation ([Fig. 12](#)).



Fig. 12

10. Step back and admire!

Acknowledgement: We thank Dr. Michael Tanzer, Chief, Department of Orthopedics, Montreal General Hospital, for his kind help in preparing this article.

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This article has been peer reviewed.

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