

**“THUMB SPICA CAST” PRACTICAL EXAMINATION
COMPETENCY ASSESSMENT SHEET (Form 1B)**

NAME: _____

EVALUATOR: _____

Date: _____

Upper Extremity Casting Technique – Thumb Spica Cast

Time allotted = 15 minutes

| Patient Position and Preparation | Exceeds Standards | Meets Standard | Approaching Standard | Does Not Meet Standard |
|--|-------------------|----------------|----------------------|------------------------|
| Seated or standing (arm in position of function when possible) | 3 | 2 | 1 | 0 |
| Extremity is clean and free from dirt/debris – rings, bracelets etc removed | 3 | 2 | 1 | 0 |
| Pre-application check – neurovascular status | 3 | 2 | 1 | 0 |
| Padding / Stockinet Technique | | | | |
| Appropriate sized stockinet reaches antecubital space to finger tips for proper fold back | 3 | 2 | 1 | 0 |
| Thumb hole cut 6” from distal end (1/2”) | 3 | 2 | 1 | 0 |
| Selects 1” stockinet 6” in length | 3 | 2 | 1 | 0 |
| -1 st cut made to allow proximal end to cover base of thumb | 3 | 2 | 1 | 0 |
| -2 nd cut made at end to split and act as fold down “handles” | 3 | 2 | 1 | 0 |
| -Adds 1” stockinet over the over thumb and following usual short arm stockinet | 3 | 2 | 1 | 0 |
| -Initiates 1” padding around thumb (2 layers applied) | 3 | 2 | 1 | 0 |
| Continues SAC stockinet application and cuts slit in palm area for fold back | 3 | 2 | 1 | 0 |
| Starts wrapping padding and provides proper padding through web space | 3 | 2 | 1 | 0 |
| Applies sufficient layers of padding in palm area (2-3 layers) | 3 | 2 | 1 | 0 |
| Continues rolling padding up arm in spiral maneuver overlapping ½ the distance | 3 | 2 | 1 | 0 |
| Cuts stockinet at the index finger and folds back to distal palmar crease & base of thumb | 3 | 2 | 1 | 0 |
| Fiberglass Application | | | | |
| Selects 1” fiberglass for thumb application ad rolls 2-3 times (distal end per MD orders) | 3 | 2 | 1 | 0 |
| Continues around base of thumb, palmar, and dorsal aspect of hand | 3 | 2 | 1 | 0 |
| Repositions thumb and continues rolling 1” cast tape around wrist/hand until end of roll | 3 | 2 | 1 | 0 |
| Thumb position close to level of 1 st MCP [not in “hitchhiker” extended position] | 3 | 2 | 1 | 0 |
| Continues cast tape application with 2” or 3” (per patient sizing) | 3 | 2 | 1 | 0 |
| Starts along dorsal wrist & covers previous edge in circular fashion to create anchor effect | 3 | 2 | 1 | 0 |
| Applies appropriate layers through web space for adequate coverage | 3 | 2 | 1 | 0 |
| Continues rolling around hand/wrist complex (4-5 layers) and covers the “cut ears” | 3 | 2 | 1 | 0 |
| Continue up arm to proximal end point and rolls two (2) added layers at proximal edge | 3 | 2 | 1 | 0 |
| Continues roll in spiral fashion towards wrist; ½ coverage finishes on radial aspect | 3 | 2 | 1 | 0 |
| Lamination and Molding Techniques | | | | |
| Adequately sprays cast with water and properly laminated fiberglass | 3 | 2 | 1 | 0 |
| Performs “Palmer” mold technique | 3 | 2 | 1 | 0 |
| Performs “Inter-osseous” mold technique | 3 | 2 | 1 | 0 |
| Performs “Proximal Triangular” mold technique | 3 | 2 | 1 | 0 |
| Distal thumb (pinched or exposed per MD preference) | 3 | 2 | 1 | 0 |
| Support and Neatness | | | | |
| Application controls thumb, wrist flexion, extension, ulnar/radial deviation | 3 | 2 | 1 | 0 |
| Allows for full finger ROM – minimizes “pistoning” within cast | 3 | 2 | 1 | 0 |
| Maintains good circulation to the fingers/thumb – post application neurovascular check | 3 | 2 | 1 | 0 |
| Removal / Extrication Principles | | | | |
| Appropriately incorporates “zip stick” between stockinet & padding (when applicable) | 3 | 2 | 1 | 0 |
| Maintains control of cast saw with one finger on cast at all times | 3 | 2 | 1 | 0 |
| Uses up/down motion straight into cast (no blade dragging) | 3 | 2 | 1 | 0 |
| Cuts through dorsal and volar aspect | 3 | 2 | 1 | 0 |
| Utilizes cast spreader as necessary (when applicable) | 3 | 2 | 1 | 0 |
| Opens cast and slides fiberglass application away from patient | 3 | 2 | 1 | 0 |
| Checks for skin damage and cleans extremity | 3 | 2 | 1 | 0 |

Comments: