

**Taichung Armed Forces General Hospital**  
**Leaflet of Inpatient Nursing Instructions**

全關節運動之護理指導

Sir/Lady:

Nursing instructions for full joint movement

I. Purpose: To assist patients who are unable to move in maintaining or increasing joint range of motion and muscle strength, promoting blood circulation, preventing deformities, and treating joint contractures.

II. Steps:

(1) Shoulder exercises:

1. Forward flexion and extension: Raise the patient's arm forward and upward to the head, then lower it back to the center (by the side).

External rotation: Raise the patient's arm to shoulder height, elbow at 90 degrees, palm facing down, and lift the upper arm so that the forearm and palm face forward.

2. Internal rotation: Raise the patient's arm to shoulder height, elbow at 90 degrees, palm facing down, and lower the upper arm so that the forearm and palm face backward.

3. Abduction and adduction: Move the patient's arm from the side of the body outward to side of the head, then return it to the center position via the side. Move the arm outward, with the palm facing up, to the side of the head<sup>5</sup>, then outward from the side of the head, with the palm facing forward, to return to the center.

4. Horizontal adduction and abduction: Raise the patient's arm to shoulder height, move it forward across the body as much as possible and move it to the opposite shoulder, then extend the arm as far back as possible while maintaining the same height.

(2) Elbows: Flex and extend—bend the elbow, then straighten the arm.

(3) Forearms:

1. Internal rotation: Secure one upper arm, then rotate the hand to make the palm face upward.

2. External rotation: Secure one upper arm, then rotate the hand to make the palm face downward.

(4) Wrist:

1. Flexion: Bend the patient's wrist, making the palm face the forearm.

2. Extension: Straighten the wrist from the flexed position.

3. Excessive extension: Bend the wrist backward, making the arm face the forearm.

4. Radial deviation: Secure the patient's forearm, then move the hand toward the radial side, making the thumb face the forearm.

5. Ulnar deviation: Secure the patient's forearm, then move the hand toward the ulnar side, making the little finger face the forearm.

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(5) Fingers:

1. Full flexion: Bend the patient's fingers toward the palm (forming a fist).
2. Full extension: Straighten the patient's fingers toward the back of the hand.
3. Abduction and adduction: Spread the fingers apart, then bring them back together.

(6) Ankles:

1. Dorsiflexion: Hold the patient's heel and press the foot's sole against the assistant's forearm. Use body tilt to bend the foot upward toward the leg.
2. Plantar flexion: Press down on the patient's dorsum and sole to point the foot downward.
3. Eversion: Secure the patient's ankle and rotate the foot outward, making the sole face outward.
4. Inversion: Secure the patient's ankle and rotate the foot inward, making the sole face inward.

(7) Continuous ankle-knee joint movements:

Hold the patient's heel and press the foot's sole against the assistant's forearm. Use body tilt to bend the foot's dorsum, then apply upward force to the sole. With the other hand, support the knee and bend it. Rotate the knee inward across the other leg, bringing the hip inward. Then, rotate the knee back to the center, bringing it toward the chest to flex the body. Rotate the knee outward to abduct the body, then straighten the leg and return to the center position.

(8) Precautions:

1. Explain the importance of exercises to the patient before starting for the patient's cooperation.
2. You may first use a warm bath or apply heat to the limbs to relax the muscles.
3. Arrange for the patient to be in the most comfortable position, and avoid unnecessary exposure. Loose any tight clothing, bandages, or braces that might restrict movement.
4. Perform exercises before meals or at least one hour after meals.
5. Start exercises from the distal finger/toe joints and work proximally. If performing passive joint movements, support the patient's joint.
6. All movements must be gentle. Avoid moving too quickly or too slowly to prevent pain.
7. Observe the patient during exercises: Is his/her consciousness level changing? Is there any change in the color or temperature of the exercised limb? Is the patient experiencing pain?
8. The duration of exercise should be such that it does not cause excessive fatigue. Initial sessions should not exceed ten minutes, and adjustments can be made according to progress.
9. Perform 5-10 repetitions of each joint activity, 1-2 times a day.
10. Exercise both the healthy and affected sides simultaneously, and allow the patient to rest briefly after each exercise session.
11. Stop the exercise if the patient feels discomfort during the exercise, such as night sweating.
12. Encourage the patient and allow the patient to express his/her feelings to build confidence.

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13. If muscle spasms or resistance is encountered, proceed slowly until the muscles relax.
14. Contraindications: Patients with acute rheumatic arthritis, malignant bone tumors with metastasis, etc.

If you are still unclear about something or have any questions, please contact the nursing station in the ward