

# Positioning

The patient's position is of considerable importance in nursing, treatment and rehabilitation care. If the patient is able to move independently, i.e. he is mobile enough, he usually takes an active position that is comfortable and pleasant for him. A different position is occupied by an immobile patient who is unable to transfer independently. It is a so-called **passive position**, which the patient is unable to control due to weakness or impaired consciousness. In this case, the patient's position changes are taken care of by the nursing team.

## Definition

Placing the person's body in healthy or beneficial positions using padding and support to promote recovery. Positioning the patient or parts of his body in such a way as to prevent complications from the wrong position.

## Goals

We always adapt the positioning method to the goal we want to achieve.

- Elimination of pain.
- Prevention of deterioration of lung ventilation.
- Prevention of deformities.
- Prevention of pressure ulcers.
- Prevention of contractures.
- Prevention of limitation of range of motion in joints.
- Prevention of hypotrophy, muscle atrophy.
- Improvement of circulatory functions.
- Correct sensorimotor input.
- Support for recognition and awareness of affected body segments.
- Limiting the risk of peripheral nerve damage.



Position on the bed with elevation of the lower limbs

## Tools

- Positioning beds, special mattresses and pads.
- Tools of all shapes and sizes made of foam and other special materials.
- Positioning splints, plates, boxes, sandbags, wedges, cylinders.
- Special aids (inflatable splints, thermoplastic splints, derotation shoes...)

## General Principles of Positioning

- The position in all segments must be comfortable, painless.
- When positioning, we check the areas prone to decubitus (scapulae spine, os sacrum, anterior superior iliac spine, elbow and heel area...).
- If the patient is able to change the position by himself, then we only help him change it and then secure it with aids.
- If the patient is unable to change the position, we make the changes passively.
- We make changes during the day after 2 hours at most, at night after 3 hours, if necessary even much earlier - pain, sensory disturbances, etc.
- We repeatedly check the chosen position and correct or change it as necessary.
- If the patient is not unconscious, we require his active cooperation.
- If he is unconscious, we still talk to him and "comment" on the process.
- If the patient has a mobile upper limb, we try to position him so that he can serve himself.

## Types of Positions

### Supination position

The supine position, best tolerated by the patient. Higher risk of pneumonia and pressure sores in the heel and sacrum area.

- Head in slight flexion;
- slight abduction in the shoulder joints and alternating internal and external rotation;
- elbow joint alternately in slight flexion and extension;
- alternation of pronation and supination;
- hand alternately in physiological and functional position;
- lower limb padded with a pillow for semi-flexion in the hip and knee joints;
- heels placed on a pillow or in anti-decubitus boots.

### Semisupinated position

An intermediate position between the position on the side and on the back. The torso is supported by a pillow along its entire length.

- Lower upper limb: shoulder in abduction and external rotation, elbow in semiflexion, forearm in supination..
- Upper upper limb: lies on the body or is supported behind the body, shoulder in the middle position, elbow in semiflexion, forearm in pronation.
- Lower lower limb: hip joint in slight flexion and external rotation, knee in flexion.
- Upper lower limb: hip in semiflexion and slight internal rotation, knee in flexion.
- Place a pillow between the knees and thighs.

## Side position

The torso is perpendicular to the mat and the head is supported on the axis. The position has a beneficial antispastic effect, protects the sacral area from pressure sores.

- Lower upper limb: shoulder in 90°, elbow in semiflexion, forearm in supination.
- Upper upper limb: lying loosely on a pillow, shoulder in slight adduction and flexion, elbow in semiflexion, pronation.
- Lower lower limb: hip and knee in semiflexion.
- Upper lower limb: cushioned, hip flexed 90°, external rotation, knee flexed 90°, legs in 0 position.

## Semi-pronated position

Intermediate position between side and stomach position. Chest supported by a pillow, head slightly rotated and also supported by a pillow. Spodní HK: rameno v abdukci a mírné rotaci, loket v extenzi.

- Lower upper limb: shoulder in abduction and slight rotation, elbow in extension.
- Upper upper limb: lying on a pillow that is under the torso, shoulder in abduction and flexion, elbow in semiflexion, pronation.
- Lower lower limb: hip in extension, knee in semiflexion.
- Upper lower limb: cushioned, hip flexed 90°, external rotation, knee flexed 90°, legs in 0 position.

## Half-seated

The position can be taken on a bed or in a wheelchair that is appropriately adjusted (tilted backrest, head support, raised footrests, calf support). The wheelchair must be individually adapted and adjusted to the needs of the patient.

- Head and neck supported by a pillow, elbow and forearm as well.
- Arms in semiflexion, slight abduction, slight external rotation in the shoulder joints.
- Elbow in 90° flexion.
- Wrist and hand in middle position.
- At first, the trunk is flexed 30–45°, we gradually increase it.

## Prone position

Also called the pronation position. We place conscious P/K and P/K with impaired consciousness in this position. Tracheostomy or tracheal intubation is not a contraindication. In conditions with necessary artificial pulmonary ventilation, this position serves to drain the alveoli.

- The head is turned to the side.
- The chest can be supported by a pillow.
- The abdomen and pelvis lie freely.
- The distal part of the lower leg and foot is padded so that the toes do not reach the pad.
- Lower limbs can also be in the "stepping" position.

## References

### Related articles

- Decubitus

### Literature

- KOLÁŘ, P. *Rehabilitace v klinické praxi*. 1. edition. Praha : Galén, 2010. 713 pp. ISBN 978-80-7262-657-1.
- ŠAMÁNKOVÁ, Marie. *Základy ošetřovatelství*. 1. edition. Praha : Karolinum, 2006. 353 pp. ISBN 80-246-1091-4.