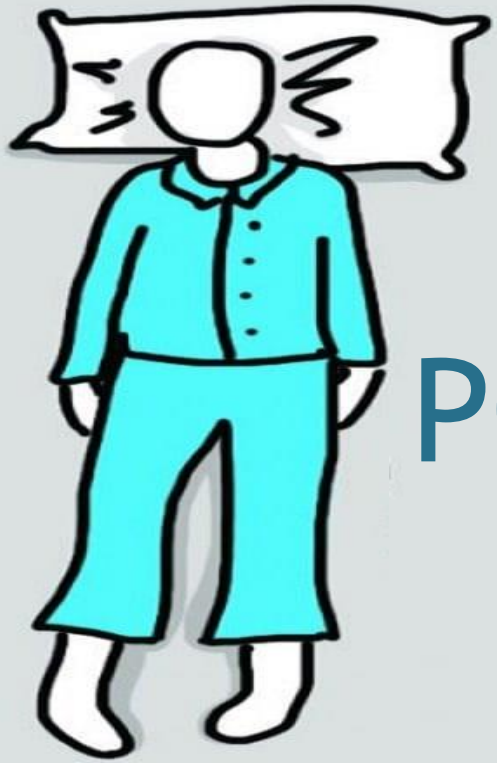

POSITIONING

Positioning

- It is recommended that patient's change their resting position in bed every 2-4 hours.
- Choice of positioning should be based upon each individuals specific needs.
- Patients should be monitored throughout and following any positional change for possible adverse effects.
- NB: The following slides do not take into account patient's with more specialist positional needs – i.e. Spinal injuries, pregnant women, prone.

Why is positioning important?

- Optimise patient comfort.
- Prevents development of pressure areas.
- Prevents development of ventilator acquired pneumonia
- Prevents development of contractures/muscle shortening.
- Assist’s with drainage of respiratory secretion's, may be advised from the physio.
- Prevention and reversal of atelectasis and improve ventilation.
- Allows the patient to be more aware and engaged in their surroundings, along side verbal orientation from staff.

Factors which influence choice of position?

- Specialist considerations –

  Head injury

  Spinal injury

  Fractures/Trauma

  Hip precaution's

  Obstetric patients

  Unilateral lung disease

  Post Below knee amputation

- Patient compliance and safety
- Condition of the skin and any area's of damage.
- Presence of drains, bowel management system, femoral lines.

Semi Recumbent

Key points –

- Back rest raised to 30 degree's minimal as per WYCCN VAP bundle.
- Arms supported with pillows placed high into the axilla to protect the gleno-humeral joint and to support the upper arm.
- Consider hand position with regular positional change (see slide ahead)
- Knee break can be used to prevent the patients sliding down the bed if not contraindicated i.e flexi-seal.

Lateral position with head elevation

Key points –

- Patients turned toward the left or right side, the degree of rotation may vary in clinical practise from 30 – 90 degree turn.
- Supported posteriorly with pillows as required to maintain the degree of rotation.
- Pillow placed to support head and neck.
- Uppermost arm supported with pillow placed into the axilla and along the line of the upper arm. Ensure forearm and hand are also supported.
- Knee break off.
- Knees positioned at approximately 45 degree hip and knee flexion.
- Pillow placed between knees and lower legs lengthways optimise patient comfort, protect the uppermost from excessive adduction/internal rotation and to prevent pressure area development to the inside borders of the knees.

A GOOD POSITION FOR VERY OBESE PATIENTS TO AID VENTILATION!

Lateral positioning

Key Point

- As per previous slide but with back rest lowered fully.
- A full 90 degree side lie position is achieved with more ease with the back rest lowered as it allows for a full turn at the pelvis and shoulders.

Hand Positions

<u>Key points</u>

- Consider more frequent changes to hand position if possible.
- Forearms can be placed in a pronated or supinated position e.g. A and B.
- Rolled up towels can be used to more specifically position the hand – concentrating on wrist, thumb and finger positioning e.g. C and D.

Monitoring

- It is advised that patient's are monitored for any lasting adverse during and for 5-10 minutes after a positional change. It is likely that there will be a change in some vital signs immediately after positional change but this should settle after 5 – 10 minutes- ***especially with covid/ARDS patients which can take up to 10-20 minutes***.

Can They Sit Up or **OUT**?

- From a ventilation point of view, being in an upright position is better, so factoring in upright sitting in positioning is a key position.

- In basic terms, sitting a patient up will cause the contents of the abdomen to move down, ‘pulling’ the diaphragm down, giving more movement of the diaphragm, assisting with thoracic volumes.

- So;

  Sit them up or sit them out- if appropriate.

References

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Webster NR. Importance of position in which patients are nursed in intensive-care units. Lancet. 1999 Nov 27;354(9193):1835-6. doi: 10.1016/S0140-6736(99)00271-8. PMID: 10584714.

Check your understanding

Q1.
Why is positioning important?

Q2.
How often should a position be changed?

Q3.
What may require more often position changes?

Q4.
How long should a patient should be monitored for following a position change?

Q5.
What is the optimum position for a very obese patient to aid ventilation?

Answers

Q1.
Why is positioning important?
Optimise patient comfort.
Prevents development of pressure areas.
Prevents development of ventilator acquired pneumonia
Prevents development of contractures/muscle shortening.
Assist's with drainage of respiratory secretion's, may be advised from the physio.
Prevention and reversal of atelectasis and improve ventilation.
Allows the patient to be more aware and engaged in their surroundings, along side verbal orientation from staff.

Q2.
How often should a position be changed?
Every 2-4 hours.

Q3.
What may require more often position changes?
Hands

Q4.
How long should a patient should be monitored for following a position change?
5-10 minutes, or 10-20 with covid.

Q5.
What is the optimum position for a very obese patient to aid ventilation?
Lateral position with head elevated.