

Patient Education: Alternating Air Mattress

What is an Alternating Air Mattress?

An alternating air mattress is a special bed that helps prevent or treat pressure ulcers (bedsores). It has air cells inside that fill and empty with air in turns. This gently shifts pressure from one area of the body to another. By doing this, the mattress helps protect the skin and improve comfort for patients who must spend a lot of time in bed.

Purpose of the Mattress

- Helps prevent bedsores by reducing pressure on the skin.
- Improves blood flow by changing pressure points.
- Increases comfort for patients who cannot move often.

Safety and Use

1. Power and Electricity

- The mattress needs electricity to run the pump.
- If the power goes out, the mattress will flatten. A flat mattress will not protect the skin.
- During a power failure, caregivers must **turn and reposition the patient at least every 2 hours** to prevent skin breakdown.
- Keep an extra blanket or cushion ready in case the mattress deflates.

2. Repositioning is Still Needed

- Even though the mattress helps, patients should still be turned and repositioned often.
- Heels should be “floated” by placing a pillow under the lower legs so the heels do not touch the mattress.
- Arms, hips, and back should be checked often for redness, warmth, or open skin.

3. Daily Care

- Keep sheets wrinkle-free and dry. Wrinkles or moisture can increase skin breakdown.
- Do not place extra pads, heavy blankets, or plastic under the patient, as this can block airflow.
- Check the pump daily to make sure it is running properly. You should feel the air cells inflating and deflating.

4. Safety Around the Bed

- Keep cords out of walkways to prevent tripping.
- Make sure the pump is plugged into a safe outlet, not overloaded with other devices.
- Keep food, liquids, and pets away from the pump.

Important Reminders for Families

- An alternating air mattress is a **tool** to help prevent bedsores, but it does not replace good nursing care.
- Patients still need to be turned, positioned, and checked regularly.
- Report any new skin redness, open areas, or pain to your nurse or doctor right away.

Patient Homework / Assessment

Answer TRUE or FALSE for each statement:

1. TRUE OR FALSE: An alternating air mattress helps prevent pressure ulcers by moving pressure around the body.
2. TRUE OR FALSE: If the power goes out, the mattress will stay inflated and keep working.
3. TRUE OR FALSE: During a power failure, patients must still be turned and repositioned often.
4. TRUE OR FALSE: Heels should be floated with a pillow under the lower legs.
5. TRUE OR FALSE: The mattress replaces the need for turning and positioning.
6. TRUE OR FALSE: Sheets should be smooth and dry to protect the skin.
7. TRUE OR FALSE: Wrinkled sheets can cause skin breakdown.
8. TRUE OR FALSE: It is safe to put heavy blankets or plastic under the patient on this mattress.
9. TRUE OR FALSE: The pump must be plugged in for the mattress to work.
10. TRUE OR FALSE: You should check the pump daily to make sure it is running.
11. TRUE OR FALSE: Repositioning is important even with the mattress.
12. TRUE OR FALSE: A flat mattress during a power outage will not protect the skin.
13. TRUE OR FALSE: Pets and liquids should be kept away from the pump.
14. TRUE OR FALSE: If you see redness or open skin, you should report it to your nurse or doctor.
15. TRUE OR FALSE: The mattress should be kept against the wall for stability.
16. TRUE OR FALSE: Cords should be kept out of walkways to prevent tripping.
17. TRUE OR FALSE: The mattress increases comfort but still needs caregiver support.
18. TRUE OR FALSE: Checking the hips, back, and arms for redness is part of good skin care.
19. TRUE OR FALSE: The mattress has air cells that inflate and deflate.

20. **TRUE OR FALSE:** An alternating air mattress alone is enough to prevent all pressure sores.

Answer Key with Explanations

1. **True** – The mattress works by shifting pressure to protect skin.
2. **False** – If power is lost, the mattress flattens.
3. **True** – Repositioning is needed during power outages.
4. **True** – Floating heels prevents sores.
5. **False** – Turning and positioning are still required.
6. **True** – Smooth, dry sheets protect the skin.
7. **True** – Wrinkles can rub and cause sores.
8. **False** – Heavy items can block airflow and increase risk.
9. **True** – The pump powers the mattress.
10. **True** – Daily pump checks ensure it works properly.
11. **True** – Mattress helps, but repositioning is essential.
12. **True** – A flat mattress does not prevent skin breakdown.
13. **True** – Liquids and pets can damage the pump.
14. **True** – Skin changes must be reported right away.
15. **False** – The mattress needs space and should not be pressed against the wall.
16. **True** – Keeping cords clear prevents falls.
17. **True** – Caregivers are still needed for safety.
18. **True** – Regular skin checks are vital.

19. **True** – Air cells inflate and deflate to reduce pressure.

20. **False** – It reduces risk but does not prevent all sores.

© 2025 Judith Regan / K.N.O.W. – Knowledge for Nurturing Optimal Well-Being. All rights reserved. |
Educational use only | Not a substitute for medical advice | In emergencies call 911