

Frostbite Caused by a Cold Pack Pillow

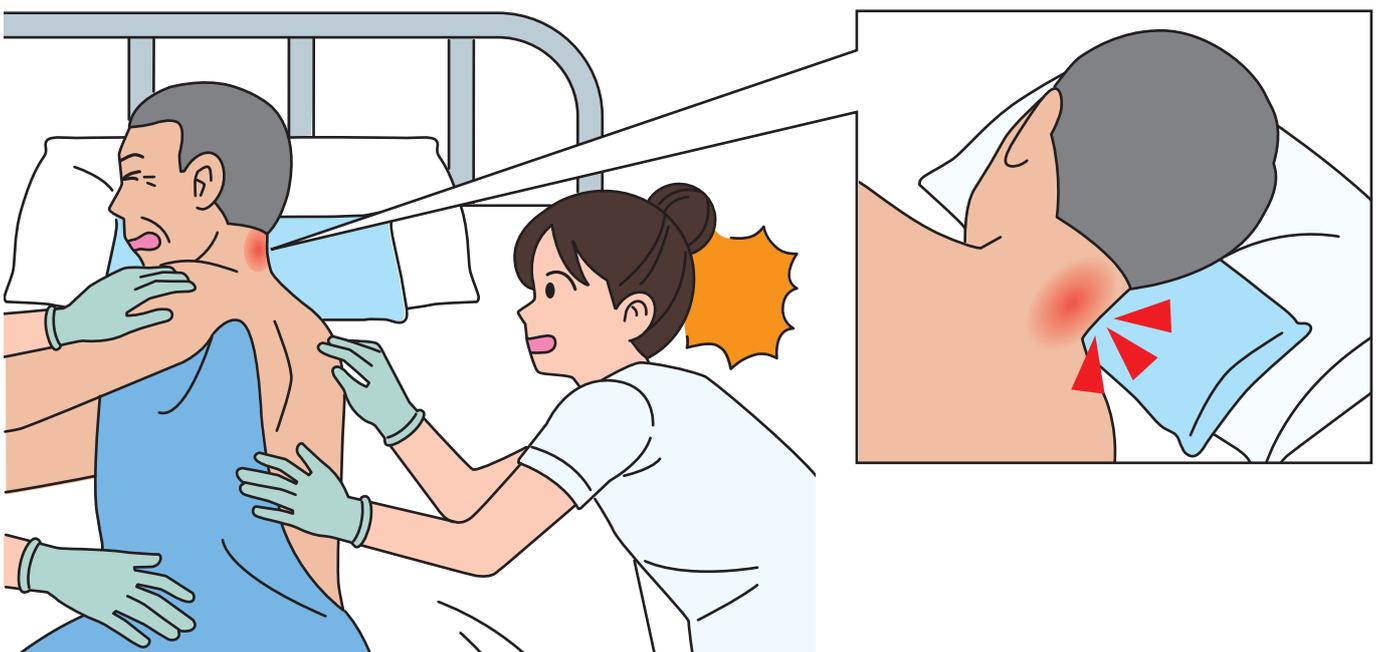
Cases have been reported in which patients suffered frostbite from a cold pack pillow.

Five such cases were reported between January 1, 2020 and August 31, 2025. This information was compiled on the basis of the content featured in the Details of Events section of the 70th Quarterly Report.

Main Background Factors of Reported Events

- The instruction manual for the cold pack pillow stated that it should be wrapped in a towel for use, but the nurse placed it against the patient's skin without wrapping the pillow in a towel.
- After placing the cold pack pillow against the patient's skin, the nurse failed to carry out observations overnight because the patient was sleeping.
- As the hospital's procedure for using cold compresses stated, "If the patient complains of discomfort, observe their skin" and the patient did not complain of discomfort, the nurse did not observe the patient's skin.

Image of case



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Case 1

The physician had issued an order for the patient to remain on bed rest after surgery. As the patient became febrile overnight, the nurse decided to use a cold pack pillow. The instruction manual for the cold pack pillow stated that it should be wrapped in a towel for use, but the nurse placed it against the back of the patient's head without wrapping the pillow in a towel. When a nurse observed the patient while giving them a bed-bath the following morning, they noticed a patch of redness measuring 3 cm × 7 cm on the back of the patient's neck, and the patient complained of a burning sensation. A dermatologist examined the patient and diagnosed frostbite.

Case 2

In the morning, the night shift nurse placed a cold pack pillow directly against the lower leg of a patient who had undergone knee surgery. As the procedure for using cold compresses stated, "If the patient complains of discomfort, observe their skin" and the patient did not complain of discomfort, the day shift nurse did not observe the area being cooled. When the day shift nurse removed the cold pack pillow from the patient's lower leg when taking the patient's temperature in the afternoon, there was a patch of redness measuring 8.5 cm × 6.5 cm on the patient's lower leg. The physician subsequently examined the patient and diagnosed frostbite.

Preventive measures taken at the medical institutions in which the events occurred

- Medical staff will refrain from placing cold pack pillows directly against patients' skin, in accordance with the instruction manual for the cold pack pillow being used.
- Medical staff will be informed of the risk of frostbite due to cold compresses.
- When using cold compresses, medical staff will periodically observe the area being cooled, in accordance with the patient's condition.
- Medical staff will explain to the patient that they should tell the nurse if they experience pain or any other subjective symptoms while a cold compress is being used.

The measures above are examples. Please consider initiatives suitable for your own facility.

* As part of the Project to Collect Medical Near-Miss/Adverse Event Information (a Ministry of Health, Labour and Welfare grant project), this medical safety information was prepared based on the cases collected in the Project as well as on opinions of the "Comprehensive Evaluation Panel" to prevent the occurrence and recurrence of medical adverse events. See the Project website for details.

<https://www.med-safe.jp/>

* Accuracy of information was ensured at the time of preparation but cannot be guaranteed in the future.

* This information is intended neither to limit the discretion of healthcare providers nor to impose certain obligations or responsibilities on them.

