Japan Council for Quality Health Care

Project to Collect Medical Near-Miss/
Adverse Event Information

Medical Safety Information

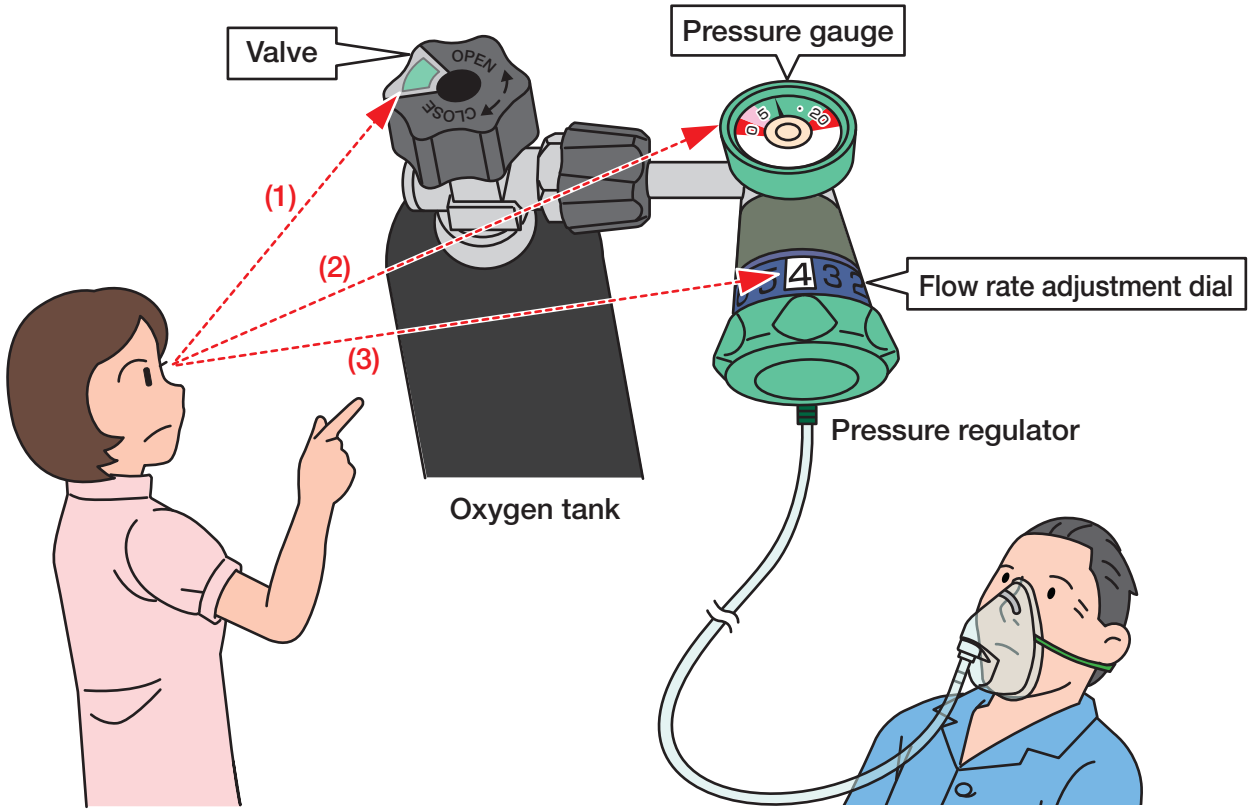
No.168, November 2020

Failure to Check Oxygen Tank Valve Was Open

Five cases have been reported in which the valve was not opened when using an oxygen tank (information collection period: from January 1, 2016 to September 30, 2020). This information was compiled on the basis of the content featured in the Details of Events section of the 61st Quarterly Report.

Cases have been reported in which oxygen was not administered to a patient due to the failure to check that the valve on the oxygen tank was open.

Check procedure when using an oxygen tank



Project to Collect Medical Near-Miss/ Adverse Event Information

Project to Collect Medical Near-Miss/ Adverse Event Information
Medical Safety Information

No.168, November 2020

Failure to Check Oxygen Tank Valve Was Open

Case 1

The nurse took the patient, who was receiving oxygen at a rate of 4 L/min, to the CT examination room. The nurse switched the patient from the oxygen tank to the examination room's supply of oxygen via the central piping system and shut off the valve on the oxygen tank. After the examination ended, the radiological technologist switched the patient back from the central piping system to the oxygen tank without checking that the valve on the oxygen tank was open. When the nurse went to the examination room, the patient's SpO_2 had fallen to 75%. The nurse checked the oxygen tank and found that the valve was not open.

Case 2

The nurse prepared an oxygen tank for transferring the patient, who was receiving oxygen at a rate of 3 L/min, to the angiography room. After adjusting the flow rate adjustment dial and checking the oxygen flow, the nurse shut off the valve. As the nurse did not discharge the oxygen remaining in the pressure regulator, the indicator on the pressure gauge continued to show a pressure of 10 MPa. After setting the flow rate adjustment dial to 3 L/min when leaving the ward, the nurse heard the sound of oxygen emerging and assumed that the valve was open. While being transferred to the angiography room, the patient's SpO_2 fell to 71%. The nurse checked the oxygen tank and realized that they had not opened the valve.

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

- **When using an oxygen tank, check that the valve is open before adjusting the oxygen flow rate.**

The measure above is an example. Please consider initiatives suitable for your own facility.

Key Preventive Measures

- **When using an oxygen tank, check (1) the valve, (2) the pressure gauge, and (3) the flow rate adjustment dial.**

(Comprehensive Evaluation Panel)

* 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.
http://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.

Department of Adverse Event Prevention
Japan Council for Quality Health Care
1-4-17 Kandamisaki-cho, Chiyoda-ku, Tokyo 101-0061 JAPAN
Direct Tel: +81-3-5217-0252 Direct Fax: +81-3-5217-0253
https://www.med-safe.jp/