

[SP-302] Look-Alike Oxygen Sensor Leads to Failed Calibration of Anesthesia Machine

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Medications and labels that look alike have led to potential or actual patient harm. Examples of this include those with epinephrine, heparin, and oxygen (1-4). We report a problem with the Maxtec MAX-1 and MAX-11 oxygen sensors which are commonly used on anesthesia machines (5). These oxygen sensors can be easily confused due to almost identical appearance and labeling (Figure).

CASE REPORT:

During a routine pre-anesthesia machine check, the oxygen sensor was unable to be calibrated correctly. The anesthesiologist checked and re-checked the anesthesia machine to make sure that all of the replacement parts were properly installed and that the oxygen sensor and electrical components were properly connected, but calibration of the oxygen sensor was still unsuccessful. Anesthesia cases were delayed or switched to another area while the company responsible for the preventative maintenance of the anesthesia machine was called regarding the problem. A representative for the company was sent to evaluate the problem. On evaluation of the oxygen sensor, it was discovered that during a routine preventative maintenance check of the Dräger Fabius Tiro Anesthesia Workstation, a Maxtec MAX-11 oxygen sensor was incorrectly replaced with a Maxtec MAX-1 oxygen sensor. When the installed oxygen sensor was removed and replaced with the correct Maxtec MAX-11 oxygen sensor, the calibration of the oxygen sensor was successfully completed.

DISCUSSION:

Similar labels and look-alike labels have caused problems and are a safety concern. We report the first case of the look-alike Maxtec oxygen sensor which prevented the calibration of the oxygen sensor on the anesthesia machine. This stresses the importance of the pre-anesthetic machine check including re-calibration of the oxygen sensor on a daily basis to ensure patient safety. We believe that anesthesia providers should be aware of these look-alike oxygen sensors and suggest that the Maxtec manufacturer address this problem.

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