Reprocessing the Handles of Rigid Laryngoscopes

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BACKGROUND: Published guidelines classify the blades of rigid laryngoscopes (used for intubation) as *semi-critical* devices that require cleaning followed by high-level disinfection (or sterilization) after each use.(3,13-15)

*Failure to reprocess the rigid laryngoscope’s handle properly, like that of its blade (to which the handle attaches), can pose an increased risk of healthcare-associated infections (HAIs).*(13) —

Lawrence F Muscarella, PhD

Based primarily on a *step-by-step* set of instructions that Dr. Muscarella published in this newsletter (in 2004) for reprocessing rigid laryngoscopes,(15) California issued a notice requiring that the rigid laryngoscope’s blade and handle be cleaned and high-level disinfected (or sterilized) after each use.(13)

[Click here](#) to read a public-health alert by the *California Department of Health Services* that – based primarily on Dr. Muscarella’s writings and recommendations – requires high-level disinfection (at a minimum) of not just its blade, but also, having classified it as *semi-critical* (not *non-critical*), of the rigid laryngoscope’s handle.

DISCUSSION: Whereas some other guidelines similarly classify the rigid laryngoscope’s handle to which the blade attaches as a *semi-critical* device,(16) a few discordantly classify the handle as *non-critical*(14) requiring cleaning and low-level (or intermediate-level) disinfection after each use.(9)

Whether such inconsistencies among guidelines for reprocessing these handles has been a contributing factor to documented instances(13,17,18) of inadequate reprocessing of rigid laryngoscopes is unclear. Similarly, whether a lack of clarity about the FDA’s and CDC’s recommendations for reprocessing the laryngoscope’s handle is another potential contributing factor to inconsistent reprocessing of rigid laryngoscopes is also unclear.

[Click here](#) to read Dr. Muscarella’s review of the Joint Commission’s (JCAHO) policy vis-a-vis the reprocessing of the rigid laryngoscope’s blade and handle. JCAHO’s policy itself can be read by [clicking here](#).

Both the FDA’s aforementioned draft guidance document on the reprocessing of medical devices(9) ([click here](#) to read it) and the CDC’s guideline for disinfection and sterilization (published in 2008)(3) ([click here](#) to read it) classify the rigid laryngoscope’s blade as *semi-critical*. Introducing the potential for user confusion and for inconsistent reprocessing, however, neither of these two documents discusses the laryngoscope’s handle and whether it is a *semi-critical* or *non-critical* device.

No matter whether due to inconsistent guidelines for reprocessing these handles, a lack of clarity about the handle’s device classification and/or minimum reprocessing requirements, or another factor, the improper reprocessing of rigid laryngoscopes has been linked to HAIs, with associated morbidity and mortality.(13,18)

This and four other controversial infection-control topics, along with Dr Muscarella’s suggested “action,” may be read by [clicking here](#).
ACTION: The FDA (and CDC) is respectfully requested to consider clarifying for manufacturers and for healthcare practitioners whether it classifies the handle of rigid laryngoscopes (which attaches to the laryngoscope’s blade and may become contaminated during direct or indirect contact with mucous membranes, or during the blade’s folding) as a semi-critical device requiring, like the blade, high-level disinfection (at a minimum) after each use.

Standardization of the reprocessing requirements of the rigid laryngoscope’s blade and handle is important to prevent user confusion, for the completeness and consistency of published guidelines, to improve the quality of instrument reprocessing, and minimize the risk of HAIs.

Click here to read Dr. Muscarella’s step-by-step guideline for reprocessing the rigid laryngoscope’s blade and handle. And, click here to read his step-by-step guideline for reprocessing flexible laryngoscopes.

CLOSING REMARKS: To reduce the risk of infection, the importance of standardizing the reprocessing of the rigid laryngoscope’s both blade and handle is emphasized.

Read a blog by Dr. Muscarella that calls into question the FDA’s current definition of “sterility.”

Indeed, inadequate reprocessing of rigid laryngoscopes has been identified as the cause of bacterial outbreaks (e.g., *Pseudomonas aeruginosa* infections) associated with patient and infant mortality and morbidity (see a USA Today article).

References: Click here.

Blog by: Lawrence F Muscarella PhD posted on 10/16/12; updated: 10/28/2013.

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Related posts:

1. Joint Commission’s (JCAHO) Recommendation for Reprocessing Rigid Laryngoscopes: Is it Valid?
2. The Reprocessing of Sheathed “ENT” Endoscopes and Cystoscopes
3. California Health Alert: Failure to Disinfect Reusable Semicritical Instrumentation Poses an Increased Risk of Infection

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