What’s new in endoscopy guidelines?

Flexible endoscope reprocessing continues to be a major focus in infection prevention. All of the known cases of pathogen transmission during GI endoscopy have been traced to breaches in accepted cleaning and disinfection guidelines or other infection prevention practices.

A revised Multisociety Guideline on Reprocessing Flexible GI Endoscopes, released in June 2011, updates recommendations from the previous 2003 edition. Among changes are more detail on reprocessing of attachments and on injection safety during endoscopy, both of which have been tied to widely publicized infection control lapses in the past few years.

The guideline also airs unresolved issues such as “hang time”; that is, how long a flexible GI endoscope should be stored before needing to be reprocessed before use on the next patient, and whether to test scopes for quality assurance purposes.

Eleven organizations participated in the update, led by the American Society for Gastrointestinal Endoscopy (ASGE) and the Society for Healthcare Epidemiology of America. Others include the major GI societies, AORN, the Association for Professionals in Infection Control and Epidemiology, the Joint Commission, and the Society of Gastroenterology Nurses and Associates. Participating for the first time was the Accreditation Association for Ambulatory Health Care (AAAHC), representing outpatient centers.

**Key updates**

In highlights of changes:

- More details are provided for critical reprocessing steps, including cleaning and drying.
- Reprocessing for attachments such as flushing catheters is reviewed.
- A recommendation is added to follow standard aseptic practices when administering medications during endoscopy procedures.

Faulty use and reprocessing of auxiliary tubing in some GI clinics, including several in the Department of Veterans Affairs, reported in 2008 led to widespread patient notifications and screening for hepatitis and HIV. A number of cases were identified, though whether they are related to the reprocessing errors is undetermined.

Unsafe injection practices led to the notorious outbreak of hepatitis in 2007 in patients treated at an endoscopy center in Nevada, attributed to reuse of syringes and use of single-use vials on multiple patients. Other such outbreaks have also been reported.

The guideline’s senior author, Bret T. Petersen, MD, FASGE, commented on some of the unresolved issues that raise questions for GI labs. He is chair of the ASGE quality committee and professor of medicine and gastroenterology at the Mayo Clinic, Rochester, Minnesota.

**Endoscope ‘hang time’**

How long a flexible GI scope can be stored before it should be reprocessed before use.
on the next patient is considered unresolved because data is lacking. Reuse within 10 to 14 days of high-level disinfection without reprocessing appears safe, the Multisociety Guideline notes. AORN, in contrast, recommends that flexible endoscopes be reprocessed before use if unused for more than 5 days.

Why the difference?

“Really, the existing data don’t define a specific timeframe after which it becomes unsafe to reuse endoscopes,” Dr Petersen told OR Manager. “Some data clearly suggest safety to 5 days, without demonstrating any risk thereafter. Some data clearly suggest safety beyond 5 days. But there is no defined endpoint to the safe shelf life or hang time in the data that have been published.”

The 10- to 14-day recommendation was adopted as a “reasonable compromise,” he says.

**Microbiological testing**

Routine microbiological testing of endoscopes for quality assurance “has not been established but warrants further study,” the guideline states.

The challenges are a lack of standardization in how to perform the testing and interpret the results. Also, the contaminants isolated from testing are frequently environmental.

“Most of these isolates are nonpathogenic and don’t represent person-to-person transmission,” he says.

Some international guidelines do advise microbiological surveillance, such as those from Europe and Australia.

Says Dr Petersen, “It is a topic that is extremely important because we do need practical validated means to track the outcome of reprocessing in the clinical setting, not just during R and D,” referring to research and development. But for now, he says, the culture techniques are not standardized, and the results are hard to interpret. For that reason, “it is hard to provide firm guidance.”

**Checking disinfectant concentration**

The guideline recommends testing the high-level disinfectant for the minimum effective concentration (MEC) at the beginning of each use day (or more frequently). Manufacturers of test strips may recommend more frequent testing.

The guideline wording was left open so GI units would have leeway, Dr Petersen says.

After discussions with representatives of the GI societies, he says, there is a sense that the manufacturers’ instructions to check the MEC before each reprocessing cycle may stem from “an abundance of caution” and are “potentially self-serving for the manufacturers. It doesn’t appear to be based on data reflecting how the dilution of the disinfectant occurs,” he says.

The little independent data available suggests it may take many uses over several days to a week before the concentrations are insufficient.

The guideline provides flexibility for sites to base their practices on their own data regarding dilution, Dr Petersen notes.

**Broad consensus**

Though a number of organizations have issued endoscope reprocessing guidelines, in nearly all respects, they are the same, Dr Petersen says.

Regarding the Multisociety Guidelines, he says, “I think the broad consensus that came out of the process we used and the number of participating organizations make
it reasonable to adopt at least the consensus parts of this guideline as definitive.” The parts that are not definitive are because of a lack of objective data.

With the participation of the Joint Commission and AAAHC, it is also likely that the major accrediting bodies will regard this guideline as definitive, though he says whether they will adopt all or part of the guideline for survey purposes is hard to predict.

—Pat Patterson