

The Q-Net™ Monthly

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Dear Newsweek,

EDITORIAL

After reading, "Do scopes spread sickness?," which appeared in *Newsweek's* March 1, 1999 issue, I couldn't help but feel, well, a little sick to my stomach. But my gastrointestinal affliction was not caused by the irrational fear of someday being exposed to an endoscope contaminated with HIV or hepatitis B. Rather, my visceral reaction was more in response to *Newsweek's* blurring of the line that separates objective medical reporting from advertisement.

What is 'Q-Net'?

Q-Net is a technology-assessment network of questions and answers. Its newsletter is *The Q-Net™ Monthly*.

Q-Net's main goal is to encourage the infection control and endoscopy communities not only to ask good questions but also to demand succinct and well referenced responses.

Q-Net addresses the needs of both the health care provider whose goal is to provide the best care possible, and the patient who deserves affordable quality health care.

Throughout its emotionally-padded article, *Newsweek* expresses opinions as facts. For example, it describes "a high-tech washing machine" that "instead of merely soaking the instruments, it blasts them with a compound called peracetic acid." While this machine indeed immerses endoscopes in peracetic acid, a chemical agent reported to be effective, it is not a jackhammer, and data supporting its ability to "blast," or presumably clean, patient soil from the surfaces of an endoscope have not been documented.

Newsweek also at times leaps from what could have been a noteworthy discussion of the dilemmas diligent instrument reprocessing personnel face each day to baseless speculation. It confesses that flexible endoscopes are extremely difficult to clean: "Endoscopes have valves and joints that are nearly impossible to scrub, not to mention channels that are 2 to 6 feet long and just millimeters wide." The article adds, "flexible endoscopes are hellishly difficult to clean." An article recently published in a daily national newspaper (*USA Today*, February 18, 1999) agrees: "... after cleaning, nobody knows for certain whether they're free of ... filth," and, "there are a lot of places in (the endoscope) where stool, blood and tissue can hide."

Such descriptions of the endoscope's complex physical design and the obstacles it imposes on thorough

cleaning are apt and indisputable. But after acknowledging that endoscopes are painstakingly difficult to clean, *Newsweek* (rather smugly) concludes that, alas, there is a rather simple solution to this reprocessing quagmire: Hospitals need only switch from using glutaraldehyde, a liquid sterilant labeled primarily for high-level disinfection, to peracetic acid, another liquid sterilant that according to its label can achieve sterilization.

But how can an instrument that is so complex and difficult to clean be so easy to sterilize? To be sure, the medical literature is well-stocked with studies that show that flexible endoscopes and other complex instruments, with long and narrow channels that hinder cleaning, cannot be as easily sterilized as *Newsweek* might have you think. In short, if cleaning is inadequate, the sterilization (and disinfection) process is likely to fail.

Similarly lacking journalistic objectivity is *Newsweek's* description of glutaraldehyde's shortcomings: "If any debris is missed (during cleaning of the endoscope), the glutaraldehyde solution doesn't remove it. Rather, it hardens the debris leaving it there to be chipped off in later procedures and passed to other patients." Although this domino-effect may be theoretically plausible, clinical evidence in its support has not been published. Yes, glutaraldehyde (like formaldehyde) is a chemical fixative. But contrary to this article's description, studies showing that inside an endoscope's channels glutaraldehyde "hardened" patient material that, at some future time, was transmitted to unsuspecting patients are lacking. *Newsweek's* depiction of this scenario as

anything other than conjecture is misleading and begs asking whether the intent of its article was less to educate than to commercialize the public's vulnerability and understandable fear of disease.

Newsweek's article similarly presents other dubious conclusions as fact, such as its intimation that glutaraldehyde's chemical properties is responsible for endoscopes being "visibly encrusted with debris." As a cursory review of the medical literature indicates, there are no published data that demonstrate a correlation between the presence of patient material on an instrument and the brand or type of liquid sterilant used by the hospital. More likely responsible for patient soil found on a "patient-ready" endoscope is poor cleaning technique and the instrument's complex design. Furthermore, glutaraldehyde, like peracetic acid, is an EPA-registered liquid sterilant; neither is a detergent designed to clean soiled instruments.

Finally, *Newsweek* concludes (somewhat incompletely and disingenuously) that, "It may seem that patients are defenseless. But they're not. The surest way to avoid infection is to seek out a facility that either sterilizes with peracetic acid or uses sheathed scopes." But before embarking on *Newsweek's* invited quest, consider the following important reprocessing facts, each of which were overlooked by *Newsweek*:

- Independent data showing that gastrointestinal endoscopes, such as colonoscopes and side-viewing duodenoscopes, can be reproducibly and reliably "sterilized" by any process, including those that use ethylene oxide gas, hydrogen peroxide plasma, glutaraldehyde, and peracetic acid, have not been published in the peer-reviewed medical literature. Many reports documenting the failure of these chemical agents to sterilize flexible endoscopes reliably and consistently, however, have been published.
- Also not published are independent data supportive of *Newsweek's* conclusion that peracetic acid (or any other liquid sterilant) is the "surest way" to prevent cross-infection. Many studies suggest that endoscopes exposed to "sterilization" processes are clinically indistinguishable from, and do *not* pose a lower infection risk than, endoscopes exposed to high-level disinfection processes.
- Olympus America, Inc. does not currently recommend peracetic acid for reprocessing its flexible endoscopes. Therefore, according to Olympus, damage resulting from the immersion of its flexible endoscopes in peracetic acid may not be covered by its warranty.

- High level disinfection (HLD) is the world-wide standard for reprocessing gastrointestinal endoscopes and bronchoscopes. This process is relatively inexpensive, destroys virtually all known pathogens, and is recommended (or deemed appropriate) by more than half a dozen professional organizations or agencies, including the Centers for Disease Control and Prevention (CDC).

Newsweek's conspicuous omission of these and other important reprocessing particulars was irresponsible and at odds with the public's trust in its presumed objectivity. The public would have been better served had *Newsweek* instead provided a balanced discussion of the FDA's views of current instrument reprocessing practices or the growing practice and associated liability of reusing disposable medical devices.



Each day we are routinely faced with new and pressing demands that challenge our commitment to patient safety. Indeed, it is the trust that our patients place in us, confident that we will do what is right, that both guides and fuels us. As we prepare to enter a new millennium, the health care community must continue to set the highest goals and standards possible, never compromising its tradition of balance and objectivity. Essential to this mission is demanding unbiased reporting that is designed to educate, not scare or manipulate. For as we strive to be the best we can be, it is our responsibility to insist on truth and fairness from both ourselves and others. *Pax vobiscum.*

Thank you for your interest in this newsletter. *I have addressed each issue to the best of my ability. Respectfully, the Publisher: Lawrence F. Muscarella, PhD. Please return completed survey to:*

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