Decontamination Alternative

To the Editor:

As a fellow nurse consultant, I've enjoyed listening to Ms Crow on the lecture circuit. In AMSCO's opinion, the "Product Commentary" (Vol 10:220-221) left much unsaid. Let me start by clearly stating that AMSCO makes both washer/sterilizers and washer/decontaminators. We believe that both can be effective decontamination methods when applied appropriately.

Ms Crow makes a strong point of the need for cleaning as part of a decontamination process. She also points out that protection of personnel should be a vital concern when selecting decontamination procedures. We whole-heartedly agree.

From an infection control viewpoint, it is essential to remember that the decontamination process consists of cleaning and the application of an effective biocidal process.[1] In the case of a washer/sterilizer, the biocidal process is steam sterilization, providing a sterility assurance level (SAL) approaching a 10^{-9} chance of a survivor. For the washer/decontaminator, the biocidal process may be exposure to hot water (180°F, minimum maintained) or that in combination with a short exposure to a chemical disinfectant. In AMSCO's equipment, we have set the SAL for the washer/decontaminator at about 10^{-4} possibility of a survivor. The generally accepted SAL for declaring an item sterile is 10^{-6}.

Ms Crow addresses only the flooding chamber type of washer/sterilizer in drawing her conclusions. Such units are usually found only in operating room suites where the machine may be used to decontaminate instruments immediately following use before soil has an opportunity to dry. Such units can be used in either the wash/sterilize mode or in the "flash" gravity displacement steam sterilization mode only.

Washer/sterilizers used in central processing departments and installed within the past 25 years are generally of another type. These employ rotating spray arms to create water jets as Ms Crow described for washer/decontaminators. Most units begin their cycle with a cool water rinse to remove gross debris without coagulating it. Then follows a wash cycle using a detergent of appropriate pH for contact with passivated stainless steel. The wash cycle concludes with a rinse and the machine then goes into a steam sterilization cycle at 285°F. This cycle produces clean, safe instrumentation, with no further need for manual or ultrasonic cleaning unless organic material was allowed to become encrusted on the instruments prior to processing, which will cause difficulty for any cleaning system. This can be prevented by following the Association for the Advancement of Medical Instrumentation (AAMI) recommended practice of keeping surgical instruments from becoming thoroughly dry prior to processing.[2]

By mid-1990, AMSCO washer/sterilizers of either type will have the capability of selecting the length of wash cycle, depending on the amount of soild present. Surgical instruments processed through such a system will easily meet both of Ms Crow's requirements (for cleaning and personnel safety) without manual cleaning.

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REFERENCES

1. Graham, G. Decontamination: a microbiologist's perspective. *Journal of Healthcare Material Management.* 1988; 6:36-41.
2. Association for the Advancement of Medical Instrumentation. *Good Hospital Practice: Steam Sterilization and Sterility Assurance.* Arlington, Virginia; 1988.

Sue Crow, MSN, RN, CIC, was asked to respond to this letter.

I have had several companies inform me that they have washer/decontaminators on the market. That is certainly good to know. The primary characteristic the user must look for in purchasing such a product is that it does indeed clean-that it removes all organic material and does not bake on soil. The cheaper one can buy this mechanism the better. Most

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