

Educator Update:

Point of Use Decontamination: A Best Practice Worth Adopting



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ANSI/AAMI ST79, Section 6.3, states that “Immediate containment and transportation to the decontamination area is ideal so that the cleaning process can start as soon as possible before biofilms (accumulated biomass of bacteria and extracellular material that is tightly adhered to a surface and cannot be removed easily) start to form.”

If this is not possible, ST79 also states that gross soil should be removed at the point of use [while wearing the appropriate Personal Protective Equipment (PPE) and using caution to avoid splashing and contamination of staff and the area]. Put simply, point of use processing is the practice of removing gross contamination from instrumentation before it is transported to a designated decontamination area.

Advantage Support Services works closely with facilities to provide standards-based education to Central Service (CS) and Operating Room (OR) teams. Point of use processing is one area of focus during our education and training. This article addresses some targeted strategies to help staff accomplish point of use processing safely, effectively and consistently.

IMPLEMENTING BEST PRACTICE

The process of removing gross contamination at the point of use can be accomplished two ways. The first and most commonly recommended method is to remove gross soil by using a moist laparotomy sponge throughout the case. *Note: Per AAMI standards, the sponge should be moistened with sterile water, not saline. This is performed as the surgeon or first assistant hands the used instrument back to the surgical technician. At that point of transfer, the surgical technician wipes the gross contamination from the instrument with a moist lap sponge before placing it back on the mayo stand.*

Another way to remove gross soil is to place a labeled basin of sterile water next to a labeled basin of saline on the back table. Although it may seem redundant to keep two separate solutions, water and saline, on the back table, both solutions play an important role in patient and instrument care. Water

is not and should not be introduced into a surgical site, due to the lack of isotonic compatibility; hence, the importance of labeling the basins of liquid. On the other hand, water should only be used to remove gross debris from instruments. Saline should never be used to clean instruments, as it can create pitting and rusting on stainless steel and other metals.

Advantage Support Services regularly educates a high-volume orthopedic group in Nashville, Tenn. Along with another orthopedic group with shared hospital privileges, the group will perform an estimated 2,000 procedures in the coming year. To say the least, that is an enormous amount of cases and patients to serve. It was discovered that point of use processing was not routinely performed by these orthopedic groups, which increased the risk of bone and bioburden drying on instruments, and made instrumentation more difficult to clean in the dedicated decontamination area. To overcome this challenge, education on point of use decontamination was provided to the team members of both orthopedic groups. For the purpose of qualifying results of our point of use processing education, we identified the two groups as “Group A” (the orthopedic group with which Advantage Support works closely) and “Group B” (the orthopedic group also working in the shared hospital). This education was delivered via written and verbal lecture, a hands-on demonstration and post testing of each team member.

As we all know, change can be difficult. As such, some team members were apprehensive about the practice change of implementing point of use processing. This came as little surprise to me. In my experience, most of the surgical technician schools (and even facility policies) do not always

openly address the concept of instrument decontamination and point of use care.

The most common concern I tend to hear regarding the implementation of point of use decontamination is the time constraints staff already face during a case. Point of use instrument care may seem like a time waster, especially when other critical duties are required in a limited timeframe; however, I always stress during my training that initiating point of use care allows the CS technician to become more proficient at his/her duties. It simply makes more sense to remove gross debris from instruments before they are transported to the decontamination area, so the next case can be more easily prepared. I remind students that if gross soil and bone remains on and in the small, hard-to-reach places, the results can be either missed debris or longer return times for the following case. This, as we well know, could result in case delays and increased risk for infection.

LESSONS LEARNED

After the education was provided for Groups A and B, both teams were reeducated several times (this was necessary to accommodate the learning curve and allow staff to become more comfortable with the new process). This entire educational process took approximately three months to complete. Following the three-month educational period, we conducted an evaluation of point of use practices. The evaluation involved observing the surgical technician's routines intraoperatively, tracking the instruments to the decontamination area, and inspecting all instruments for gross soil and bone in small crevices.

Our findings concluded that Team A fully adopted the practice of point of use care and was 100% compliant. They not only introduced a labeled basin of sterile water onto their back table in the OR, but also incorporated the damp lap sponge approach in the sterile field, so the technician could easily remove gross soil at the point of instrument transfer. The results were exciting: this compliance with point of use care resulted in devices that were free of gross contamination and bone (even in the smallest crevices of orthopedic instrumentation) upon the devices' delivery to the decontamination area. Team B, on the other hand, practiced point of use care more sporadically — an outcome largely stemming from staff apprehension and some team members' reluctance to readily adopt the practice.

A final meeting was held to discuss these findings with the hospital's surgical administration and directors, as well as both

orthopedic teams. The results were conclusive: the provision of clean and sterile instruments (with no bone/gross debris remaining in crevices upon delivery to the decontamination area) was a direct result of Team A implementing point of use instrument care into its surgical routine. On the other hand, it was determined that Team B, which had not been fully complied with point of use care practices, continued to find bone and gross debris in instruments (especially in punches), weekly.

IN CONCLUSION

Education and practice change initiation takes time, patience and perseverance, but in the case of point of use instrument care — which removes gross debris prior to sending devices to the decontamination area — findings show it's time well spent. As with all instrumentation-related education, ongoing training is key to driving 100% compliance.

FOR FURTHER READING

Association for the Advancement of Medical Instrumentation. ANSI/AAMI ST79:2010 & A1 & A2 & A3 & A4 45 6.3 Care and handling of contaminated reusable items at point of use.

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