was no difference in 30-day mortality between a standard dose and a high dose (HR, 1.01; 95% CI, 0.51–1.97). However, we detected a trend toward poor survival with a low dose compared with a standard dose (HR, 1.21; 95% CI, 0.73–2.02). **Conclusions:** A standard dose of daptomycin was significantly associated with lower 30-day mortality compared with continued vancomycin treatment. Accurate dosage of daptomycin and avoidance of low-dose daptomycin should be a part of good antibiotic stewardship practice.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.750

Presentation Type:
Poster Presentation

Effects of Irregularities in the Microstructure of Surgical Instruments on Microbial Adherence and Challenges for Processing

Figure 1. Scanning electron microscopy of surfaces of surgical instruments. Belo Horizonte, Minas Gerais, Brazil, 2019.

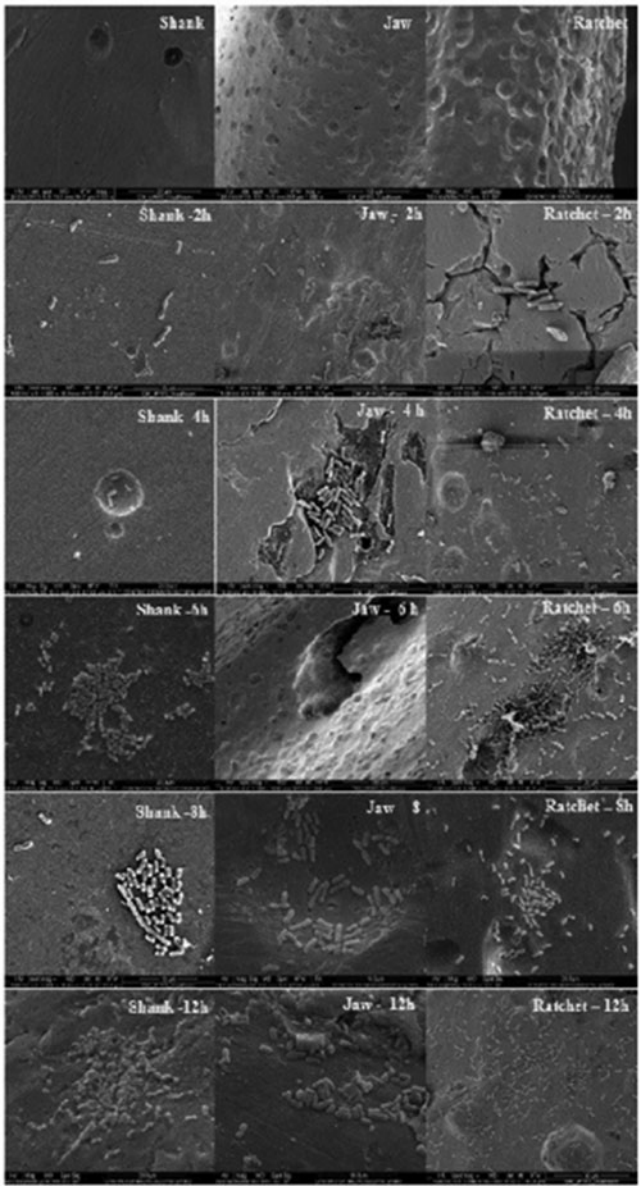

Fig. 1.

Sintia Evangelista, Federal University of Minas Gerais; Adriana Oliveira, Federal University of Minas Gerais

Background: A surgical instrument can have areas that pose different challenges to cleaning, hindering the removal of dirt. This can directly impact the effectiveness of its processing while potentially promoting cross contamination. Moreover, structural changes (ie, cracks or fissures) on the instrument surface, although rarely addressed, can act as reservoirs for microorganisms, contributing to organic matter retention, microbial growth, and biofilm formation. Our aim was to determine the effect of irregularities in the microstructure of surgical instruments on microbial adherence. **Methods:** We analyzed 18 fragments of 3 distinct areas of new crile forceps: the ratchet, shank, and jaw. Of these fragments, 15 were artificially contaminated by immersion in tryptic soy broth containing 10 × 6 CFU/mL of *Escherichia coli* (ATCC 25922), for 4, 6, 8, and 12 hours of incubation at 37°C with agitation at 100 rpm. The other 3 fragments were used as controls. All fragments were subjected to scanning electron microscopy to evaluate the adhesion of the microorganism. **Results:** An irregular surface was found in 3 of 6 shank fragments (50%) (Fig. 1) and in all the jaw and ratchet fragments, grooves, and cracks. Initially, there was less adherence of *E. coli* to the smooth shank surface after contamination, but the concentration of the microorganism increased progressively over time in relation to that in the jaw or ratchet at the same time, and a higher concentration occurred in the cracks and grooves. **Conclusions:** Structural damage was observed in all fragments, especially in the ratchet and jaw areas, favoring microbial accumulation. Microorganisms housed in the cracks and grooves were better protected from removal by scrubbing with a brush (being unlikely to reach them), making these areas a microbial reservoir and source of contamination. Prolonged contact of the instrument with the contaminating microorganism allowed for greater adherence, even on the smooth areas. The results support the relevance of the early onset of cleaning, considering that even microscopic changes on the surface of the instrument may represent an additional challenge to its effective processing.

Funding: None
Disclosures: None
Doi:10.1017/ice.2020.751

Presentation Type:
Poster Presentation

Efficacy of a Sink Tailpiece Heating Device to Decrease Microbial Colonization of Sink Drains

Stacy Park, University of Virginia; Shireen Kotay; Limor Steinberg, University of Virginia; Katie Barry; Joanne Carroll, Antimicrobial Resistance Services; Amy Mathers, University of Virginia; April Attai, University of Virginia

Background: Many institutions have reported transmission of multidrug-resistant organisms to patients from colonized sinks. Prior data have shown that bacterial colonization of the sink drain, which can occur via biofilm from a colonized p-trap or via seeding from above, results in dispersion of bacteria in the area of the sink when water from the faucet comes in contact with the drain. Heat disruption of biofilm formation between the p-trap and sink drain is a potential strategy in preventing colonization of sink drains. **Methods:** In an academic