Comparison on the Efficacy of Endoscope Reprocessors:
COOLENDO/SAN-Q vs. OER-A/Cydex-OPA

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Background: Since endoscopes are reusable apparatus, thorough cleaning and disinfection is very important to minimize the spread of infection through endoscopes. Endoscopes are classified as semicritical items and thus high-level disinfection - removal of all bacteria except for resistant bacterial spores - is required. Many efforts are put into making newer disinfectants and improving the efficacy of endoscope reprocessing. Recently, a new endoscope reprocessor that uses polyhexamethylenebiguanide hydrochloride (PHMB) and alkyl dimethylbenzylammonium chloride (DBAC) as disinfectant and applies ultrasonographic cleansing to maximize reprocessing efficacy and shorten the duration of reprocessing has been released. We therefore aimed to compare the efficacy of two automated endoscope reprocessors: COOLENDO/SAN-Q vs. OER-A/Cydex OPA.

Material and Methods: Random sampling was done on 60 endoscopes. Samples were taken from the tip of insertion tube with swab wetted with normal saline and also after rinsing the working channel with 30 mL of normal saline which was later filtered through a membrane filter of 0.22 μm in size and then incubated onto blood agar plate. The presence of any cultured organism, including H.pylori, was assessed.

Results: The culture-positive rate at the tip of insertion tube and working channel was 6.67% and 6.67% for COOLENDO and 13.3% and 6.67% for OER-A (Fig. 1). Culture-positive rate was highest for old endoscope (C). Cultured organisms are shown in Table 1.

Conclusions: The reprocessing efficacy of COOLENDO/SAN-Q was comparable to that of OER-A/Cydex OPA.

Key Words: Endoscope reprocessing, Disinfectant, High-level disinfection