

**LETTER**

# Selective digestive decontamination is superior to selective oropharyngeal decontamination

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See related research by Schultz and Haas, <http://ccforum.com/content/15/1/R18>

We are interested in the debate on the efficacy and safety of selective digestive decontamination (SDD) and selective oropharyngeal decontamination (SOD) raised by Schultz and Haas in their review [1].

The authors concluded that 'SDD and SOD are equally effective with respect to the prevention of mortality' [1]. This statement is based on the results of a Dutch randomized controlled trial [2], which was the first to demonstrate a survival benefit of SOD. However, the mortality reduction was higher, albeit not significantly, in the SDD group than in the SOD group. Additionally, a recent meta-analysis, including nine SOD randomized controlled trials and 4,733 patients, failed to show any significant mortality reduction (odds ratio (OR) = 0.93; 95% confidence interval (CI) = 0.81 to 1.07) [3]. In contrast, there is robust evidence indicating that SDD including parenteral and enteral antimicrobials significantly reduces mortality [4].

The authors wrote that 'whether SDD or SOD are favorable with regard to development of antibiotic resistance is yet unknown' [1]. The Dutch randomized controlled trial, however, showed that patients with aerobic Gram-negative bacilli in rectal swabs resistant to the marker antibiotics numbered less with SDD than with SOD [2]. Additionally, bacteremia due to highly resistant pathogens was significantly reduced by SDD compared with SOD (OR = 0.37, 95% CI = 0.16 to 0.85), and lower respiratory tract colonization due to highly resistant pathogens was lower with SDD (OR = 0.58, 95% CI = 0.43 to 0.78) than with SOD (OR = 0.65, 95% CI = 0.49 to 0.87) compared with standard care [5].

We believe that SDD is superior to SOD in terms of both mortality reduction and emergence of resistance.

**Abbreviations**

CI, confidence interval; OR, odds ratio; SDD, selective digestive decontamination; SOD, selective oropharyngeal decontamination.

**Competing interests**

The authors declare that they have no competing interests.

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