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Conflicts of interest: None.

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Customizing the indication of chlorhexidine mouthwash for critically ill patients: A reply letter to Honore P.M. and colleagues



Dear Editor,

We read with great interest the comments performed by Honore and colleagues¹ about our recently published article addressing the impact of a dental care intervention on the in-hospital mortality of critically ill patients.² We do agree with them that there is now enough evidence for not routinely using oral topical chlorhexidine

among hospitalized patients, for the purpose of preventing health-care-associated infections.^{3–5} Unfortunately, in Brazil, chlorhexidine mouthwashes are still largely used, especially in the intensive care setting, despite all the evidence of its negative impact on mortality.

On the other hand, our results point in the direction that chlorhexidine topical cautious application may do more good than harm to a specific subset of critical patients. We are talking here about people with intra-oral infectious diseases, such as deep caries, oral abscesses, or periodontal disease, for example. In most of these cases, the oral microbiome has long been deeply compromised, and, therefore, the negative impact of using chlorhexidine on that would be offset by its positive impact on controlling the oral infection and inflammation. Among our last study population, chlorhexidine was used in approximately one-third of all oral hygiene procedures (723/2136) performed by dentists. In such cases, dentists managed to focus the antiseptic application on the source(s) of infection, rather than generally applying it in the whole oral cavity.

If we do parallel thinking with systemic antibiotic use, similar outcomes are found. We mean, if adequate antibiotics are prescribed to patients with a treatable infectious disease, a clear clinical benefit is produced in most cases. However, when prophylactic antibiotics are prescribed for long periods of time, superinfections with *C. difficile*, yeasts, and multidrug-resistant microorganisms frequently arise, and no clinical benefit is obtained for the patient.^{6,7}

So, in conclusion, our perception goes in the direction that “one size does not fit all”, and a customized approach is the best way to go when considering the use of chlorhexidine mouthwash among critically ill patients.

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