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In response to «Oral care with chlorhexidine: One size does not fit all»

Respuesta a «Higiene oral con clorhexidina: una recomendación única no sirve para todos»

Dear Editor,

We appreciate the comments by Llaurado-Serra et al. in relation to the article ''Update on the recommendations of the Zero Pneumonia project'' published in 2022 in **Enfermería Intensiva**.[1] In response to your comments, we would like to make some clarifications. On the one hand, we feel we need to clarify that the updating of the Zero Pneumonia (NZ) recommendations, together with those of the rest of the Zero Projects (PZ), is due to the negative impact of the SARS-Cov-2 pandemic on the application of PZ recommendations and the infection rates monitored in ICUs,[2] as well as the need to review and adapt the recommendations made in 2011. In these recommendations, and as part of the NZ Bundle, the measure of oral hygiene with chlorhexidine in intubated patients had already been included, after having demonstrated its efficacy nationwide in reducing rates of pneumonia associated with mechanical ventilation (NAVM) in Intensive Care Units (ICUs).[3]

On the other hand, we continue to support oral hygiene with 0.12%–0.2% chlorhexidine to prevent VAP in critically ill patients. This is essentially because, as evidenced in a recent systematic review and meta-analysis that includes 10 randomised clinical trials (RCTs),[4] chlorhexidine prevents VAP in critically ill patients, even at low doses, as recommended, showing no adverse effect on mortality rates. Specifically, the oral application of chlorhexidine reduced the incidence of VAP, (RR, 0.73 [95% CI, 0.55, 0.97]) and did not show an increase in all-cause mortality (RR, 1.13 [95% CI, 0.96, 1.32]).[4]

Indeed, as we recognise in the NZ Project document,[5] the use of chlorhexidine is not without adverse effects. However, these are not limited to intubated patients with MV, observing irritation of the buccal mucosa in only 10% of those treated with 2% chlorhexidine, a higher dose than recommended.

With regard to what has been argued regarding the increased risk of mortality associated with oral hygiene with antiseptics, as previously mentioned, no RCT has been found that has shown an association between oral hygiene with chlorhexidine and higher mortality rates. It should also be mentioned that the cohort study cited by the authors to argue for this association[6] includes patients from the entire hospital. This association was not seen in ICU patients with mechanical ventilation (MV), the population to which we address this recommendation, but rather in hospitalised neurological patients. In addition, the high risk of bias in this type of study cannot be ignored when interpreting the results.

Therefore, and taking into account the evidenced beneficial effect of chlorhexidine on the prevention of VAP in critically ill patients, we believe that removing it from the NZ bundle would place hospitals in a dilemma as to what to use instead of chlorhexidine for oral hygiene.

We appreciate the interest shown in our article, by your letter, although we do not share the title, since we recommend its use only in critically ill patients who require MV, where its effectiveness has been demonstrated. Furthermore, the arguments provided against chlorhexidine in oral hygiene are already known and discussed in the scientific literature. Like the rest of the drugs that are administered to patients with the intention of preventing infections, the pros and cons of administering them must always be weighed up. For that reason, after conducting an exhaustive review of the literature and assessing the advantages of 0.12%–0.2% chlorhexidine in oral hygiene in patients who require MV, we decided to maintain this recommendation within the bundle of measures in the NZ project.

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Conflicts of interest

No conflicts of interest.

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