On cleaning and sterilisation of customised abutments and disappearing implant failures

Being an editor of a scientific journal is a stimulating and eye-opening task since it exposes you to different types of research that you would not normally have considered. I was surprised to receive a small explanatory RCT, published in this issue of EJOI, comparing the clinical outcome of customised abutments randomly allocated to be cleaned with two different modalities: steam cleaning for 5 seconds and cleaning/sterilisation with argon plasma for 12 minutes. Results showed a better maintenance of marginal bone levels 2 years after loading around sterilised abutments (a significant difference of 0.4 mm). Intrigued by the results of the trial, I asked the authors to provide all of the periapical radiographs for an independent check and I also investigated whether it was a common procedure not to sterilise customised abutments. The results of my brief investigation are the following: the radiographic assessment was reliable and it appeared that customised abutments are not commonly cleaned and sterilised. What is the lesson of the article? Please do clean and sterilise abutments prior to their placement.

The position of editor also allows the disclosure of an odd phenomenon: failed implants disappearing from publications. This phenomenon exists, but cannot be easily perceived by readers since they do not have access to unpublished information. I received a manuscript some time ago on maxillary sinus floor augmentation. Ten patients were included in each group according to a parallel group design. According to the data presented in the manuscript, one implant could not be placed and 2 or 3 implants failed in the experimental group (the number of failures varied in different parts of the manuscript) versus no implant failures in the control group. Unfortunately, the authors did not appreciate the referee comments on how to revise the manuscript (if revised it would have been accepted), so they withdrew it. Then, while updating a systematic review, I encountered the same trial again, published in another scientific journal, and the information regarding the 2 or 3 implant failures was omitted! This of course could be a mistake, though it might have to be clarified and corrected in one way or another. However, it begs the question of how many 'mistakes' like this are published? Nobody knows of course, but I am afraid that they are much more that we can imagine. We need to take more care when reporting important data, and when mistakes are discovered we should be humble enough to disclose and correct them.

Happy reading!
Marco Esposito
Editor-in-Chief