Study on Oral Cleaning Before Cancer Surgery Lacks Bite

By Erik Lief — August 31, 2018

The headline read, "Dental care before cancer surgery might be good idea."

An intriguing concept, one that warranted a closer look. But learning more and more about the results of a recently-released study, the more confounders, underwhelming data and limitations surfaced, and the intrigue I had felt slowly faded to indifference.

The study, titled "Preoperative oral care and effect on postoperative complications after major cancer surgery" and published online in the British Journal of Surgery, came to this conclusion: "Preoperative oral care by a dentist significantly reduced postoperative complications in patients who underwent cancer surgery."

But as it turned out the results were thin, and those patients who made a dental visit prior to surgery had just a slightly less chance of having pneumonia after surgery, or dying within a month of the operation. Not to mention that patients who may have been relatively healthier than others may have been the ones more likely to be referred by their doctors to receive preoperative dental care.

In the final analysis, among the cancer patients who saw a dentist before their operation, their pneumonia risk decreased by just 0.5 percent.

"I think these findings are interesting," said Dr. Quoc-Dien Trinh, the co-director of the Dana-Farber and Brigham and Women's Prostate Cancer Program, as quoted in the Reuters article, referenced above. "However, while statistically significant, one has to wonder how clinically relevant they are because the differences are – on an absolute scale – quite small.” The Boston-
based physician did not take part in the study.

In the study of Japanese patients, roughly 16 percent of the 509,000 cancer patients who underwent surgery – slightly less than 82,000 – saw a dentist beforehand where oral germs and microorganisms were cleansed away (a practice that has support in the medical community). The authors wrote that "15,724 patients (3.09 percent) had postoperative pneumonia and 1,734 (0.34 percent) died within 30 days of surgery."

The impetus for the study, the authors said, was the lack of knowledge in this field because previous studies were considered too small. But this study, while far larger, produced its own problems, with the authors citing "several limitations" such as:

- "Because the intervention of preoperative oral care by a dentist was not standardized, the quality of the procedures was dependent on the specific hospital or dentist."
- "No data were obtained on several potential confounders, including BMI [body mass index], smoking status and functional dependency."
- "The results may not be generalizable to other countries because the study included only Japanese patients."

In short, there's too much left unknown from this study, and whether having a dental visit is truly beneficial prior to this serious type of surgery.