

local constituents. Let them know your feelings.

Your constituent officers were elected to represent you (the grassroots members). Communicate with them. Bylaws can be changed (as you have recently found out). Even recently changed bylaws can be changed back.

Your voice is important—use it!

Ralph T. Nelson, D.D.S.
Past-president
LAGD component
Peoria, Ill.

POST-TREATMENT BACTEREMIA

The article "Preventing Post-Treatment Bacteremia: Comparing Topical Povidone-Iodine and Chlorhexidine" by Rainer Rahn and others (August JADA) was of particular interest to me. I have been advocating the "sanitization" or gingival degerming procedure since 1956.¹ Although I am in accord with their recommendations, I wish to call attention to some flaws in their investigation.

■ They should have separated their results into separate categories: incidence of bacteremia following extraction of a molar and incidence of bacteremia following interligamental injection. I am aware that they had 60 of each. The separation of the results would have added another dimension to our knowledge since there are no bacteremia studies associated with interligamental injections to my knowledge. Unfortunately, they lumped the results together. Moreover, the title of the paper suggests that the study is more inclusive than just one treatment procedure.

■ Another criticism for consideration is the difference in the degree of trauma between extraction of a molar and an interligamental injection.

Studies have shown that the magnitude, incidence and duration of dental bacteremia are related to the degree of trauma.²⁻⁴ Certainly, the procedure of extracting a molar opens many more blood vessels, for bacteria in the gingival sulcus, to gain intravascular entry, than the trauma of an interligamental injection. Although molars were designated as the teeth for extraction, there was no designation as to where the ligamental injection was administered. Was it only in the molar region? There may be differences in the incidence of bacteremia.

Furthermore, the extraction of a lower first molar with the widespread roots is more traumatic than the extraction of a lower second molar whose roots are more often fused and conical in shape, requiring a lesser rocking motion. The same may be said for the upper second molar.

Although the authors carefully took into account the oral hygiene and periodontal scores, the trauma scores were neglected. There is a statistically significant difference in bacteremias between heavy and mild trauma in the exodontic group.² Perhaps chlorhexidine is only effective in cases of mild trauma.

Finally, what was the basis of selecting the two drugs, at their respective concentrations, for the comparative study? Also, why was no discussion offered concerning differences in previous chlorhexidine studies? Their conclusion, gingival sulcus irrigation with povidone-

iodine, only confirms the result of other investigators.⁴

I.B. Bender, D.D.S.
Chair Emeritus
Department of Dentistry
Albert Einstein Medical
Center
Professor Emeritus
University of Pennsylvania
Elkins Park, Pa.

1. Bender IB, Pressman RS. Antibiotic treatment of the gingival sulcus in prevention of postextraction bacteremia. *J Oral Surg* 1956;14:20.

2. Bender IB, et al. Bacterial endocarditis: a consideration for physician and dentist. *JADA* 1984;109:415-20.

3. Bender IB, Pressman RS. Factors in dental bacteremia. *JADA* 1945;32:836-53.

4. Bender IB, Montgomery S. Nonsurgical endodontic procedures for the patient at risk for infective endocarditis and other systemic disorders. *J Endod* 1986;12:400-7.

Author's response: I agree with Dr. Bender in principle that it would better to separate the different categories of treatment. On the other hand, a study I performed 10 years ago demonstrated clearly that the incidence of bacteremia following intraligamentary injection is approximately 60 to 70 percent.

It is well-known (from studies of Dr. Bender, but also from my own studies) that incidence of bacteremia is related to the trauma. I concluded from my own studies that traumatization during extraction of teeth may have the same intensity as traumatization by intraligamentary injection. I think that incidence of bacteremia does not only depend on the number of blood vessels that are opened during a treatment but also the hydrostatic pressure of the syringe. I can imagine that this hydrostatic pressure (we measured values up to 400 newtons) may open many blood vessels and press bacteria