

Academy of Osseointegration State of the Science in Implant Dentistry Conference  
August 3-6, 2006  
Chicago, IL

Secretary Clara Spatafore and Executive Director Jim Drinan attended the SSID meeting in Chicago from August 3 through August 6<sup>th</sup> at the Oak Brook Marriott. Also in attendance with AAE affiliation were Drs. Ken Hargreaves, our section chair, Jeff Hutter, Shimon Friedman, and Karl Keiser. Our section addressed the systematic review performed as a result of the PICO question "For teeth requiring endodontic treatment, what are the differences in outcomes of restored (single) endodontically treated teeth compared to (single) implant supported restorations. The review was conducted by Drs. Syngcuk Kim and Mian Iqbal, endodontists from the University of Pennsylvania. The article is currently in press for the International Journal of Oral and Maxillofacial Implants and is included with this report. Other section members were Drs. David Shafer, Robert Cronin, Rodger Lawton, Samuel Low, Paul Robertson, Philip Sheridan and Mark Wolf. Five questions were addressed by each section regarding the systematic review performed as a result of the assigned PICO question. For the questions as well as the responses please see attachment.

The entire conference was engineered by the Academy of Osseointegration. There were eight separate PICO questions addressed by eight sections. The meeting was sponsored by several manufacturers as well as the Foundation for the Academy of Osseointegration. The meeting was organized, planned well, and a very positive overall experience.

The findings of the systematic review were accepted without question by the section. The systematic review was done in a highly professional, effective manner and the results supported the idea that there is no difference in the survival rate of single tooth implants compared with an endodontically treated restored tooth. The article addressed pertinent problems inherent in trying to compare the two treatment modalities. Survival was the factor selected for comparison in the review.

## **SSID SECTION 4 ONSITE REPORT**

### **1. Does the section agree that the systematic review is complete and accurate?**

The Section agreed that the systematic review was complete and accurate. In addition, we believe that this PICO question addresses a critical issue in dental care. However, we note in particular that the PICO question is limited to the restored single tooth implant and the restored endodontically treated tooth.

The rationale and approach of the systematic review were considered appropriate for evaluating the survival of the restored single tooth implant and the restored endodontically treated tooth. For this focused question on the restored single tooth implant and the restored endodontically treated tooth, survival is an appropriate and available outcome measure that permits evaluation of the two therapeutic approaches. The literature search and methods are well described and overall the Section believes that the review is thoughtful in considering the PICO question in the context of comprehensive patient care.

### **2. Has any new information been generated or discovered since the review cut-off time?**

There were two investigations available after the review cut-off time. The first of these is the study by Doyle et al (J Endod in press 2006) which is the only article that directly compared restored single tooth implants with endodontically treated tooth with coronal restoration. The conclusions are consistent with the systematic review and the results have been included in the systematic analysis. The second was a review article by Torabinejad and Goodacre (JADA 137:973, 2006) that presented no new data, and therefore was not included in the analysis. However, the expert opinion is consistent with conclusions of the systematic review.

In addition, it is important to note that the results from the systematic review of Section #3 (single tooth implants and tooth supported restorations) generated implant survival rates quite similar to the implant survival rates reported in the systematic review of Section #4.

### **3. Does the section agree with the interpretation and conclusion of the reviewers?**

The Section agrees with the reviewers that the quality and methodology of the published literature were not ideal for addressing this PICO question and therefore the conclusions are suggestive but not definitive. The state of the present literature does not include clinical trials where the restored endodontically treated tooth and the restored single tooth implant are randomly allocated to sites in which either treatment can be placed.

The Section agrees with the interpretations and conclusions of the systematic review with the following consideration. We discussed the reviewers' statement that "priority should

therapeutic approaches. In such cases, the results of the systematic review suggest that the treatment decision is a matter of clinical judgment and informed patient preference.