



Dr. Jae Hyun Park
PCSO Bulletin Editor

PCSO Program Research Review

At the 2015 PCSO Annual Session, I had the honor of collaborating with my colleagues Dr. David Covell, Dr. Greg Huang, and Dr. Glenn Sameshima to judge the E-posters. Presenters were from the 12 PCSO postgraduate orthodontic resident programs or were new and younger PCSO members (up to five years post-graduation). They covered a wide variety of orthodontic topics, and the winners were recognized at the New and Younger Member Luncheon.

This experience allowed me to reflect on the research being done by our postgraduate orthodontic programs, and to think about how we could give this research broader exposure among PCSO members and those of other organizations. This research can be of great benefit to private practitioners in guiding treatment methods and influencing decisions when it comes to purchasing new products. Because manufacturers eagerly distribute prototypes of orthodontic products to postgraduate orthodontic programs, faculty and residents are often the operating pioneers for leading-edge technologies, and are able to evaluate their potential usefulness. For example, as temporary skeletal anchorage devices (TSADs) became a viable treatment option in modern orthodontics to reinforce orthodontic anchorage and expand the range of tooth movement, they have become increasingly popular in residency programs. According to the “Program Talk” column in the Summer 2014 PCSO *Bulletin*, most postgraduate orthodontic programs in the PCSO region use TSADs for molar intrusion for open bite closure and en-masse retraction/protraction. All programs cited the hard palate as being the most reliable placement site, and listed factors related to surgical technique as the most common reasons for TSAD failure. The combined

knowledge of the academic use of TSADs, indications for use, and specific mechanics may be interesting to private practitioners looking to incorporate this technology into their practice.

CBCT Rapidly Gaining Popularity

Cone-beam computed tomography (CBCT) has rapidly gained popularity with dentists and orthodontists. Thanks to improvements in modern machines, patient exposure to radiation has been reduced through options that limit the field of view (FOV) and reduce exposure time. CBCT has expanded diagnostic capability by facilitating accurate measurements and aiding in the localization of impacted teeth. Other areas—such as treatment planning for placement of TSADs—have progressed as information about surrounding structures such as root proximity and the anatomy of maxillary sinuses has become readily available. The evaluation of surgical treatment progression has also improved with CBCT through orthognathic surgery superimposition, which assesses post-surgical changes in skeletal and soft tissues.

A New Column for the Bulletin

The above are just two quick examples of popular areas of research. As new technologies and appliances are developed and marketed, research will continue to expand in support of evidence-based clinical practices. As private practitioners are regularly introduced to clinical information on new products, postgraduate orthodontic programs are in a great position to help guide them towards those products that have proven to be the most effective and efficient, and to verify the validity of manufacturers' claims. Thus, postgraduate orthodontic residency programs provide an ideal environment for testing evidence-based

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orthodontics. To encourage the further exposure of postgraduate research, a new column called "PCSO Program Research Review" is being introduced with this issue.

Dr. Alyssa Levin will be in charge of this new column. Program chairs will consider clinical and scientific research that has recently been published by their faculty or program and ask senior residents to write summaries of select articles published by their schools. Each program will publish a review once every three years. Based on alphabetical order, the first column will be writ-

ten by a resident at A.T. Still University. I hope this new column will showcase the research being done at postgraduate orthodontic programs while serving as a valuable resource to practitioners as they consider introducing new products or techniques to their offices. ♦

*Jae Hyun Park, DMD, MSD, MS, PhD
Diplomate, American Board of Orthodontics;
Professor and Chair, Postgraduate Orthodontic
Program, Arizona School of Dentistry
& Oral Health (Mesa, AZ)
pcsoeditor@aaortho.org*

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