Orthognathic surgery course draws trainees from across the country

by John Dent Curtis June 17, 2016

Orthognathic surgery is a series of procedures that address functional and appearance-related concerns of the face. One or both jaws are detached from the skull and repositioned to optimize cosmetics, function, breathing, facial support, occlusion, and smile. These procedures were performed only five to 10 times per year at Yale until the arrival a few years ago of plastic surgeon Derek Steinbacher, D.M.D, M.D., chief of oral and maxillofacial surgery and dentistry. The number of these cases has since increased to more than 100 per year. As Yale and Yale New Haven Hospital have become a high-volume center, Steinbacher has developed a hands-on surgical teaching lab for trainees hoping to learn this surgery, which is technically challenging and requires specialized expertise and training. On May 14 and 15, more than 70 residents and faculty from around the country came to the School of Medicine to participate in the course.

The number of orthognathic procedures has grown, Steinbacher said, because of the relative need in this area. Another key factor is a monthly multi-disciplinary planning conference that brings together orthodontists, plastic, and oral/maxillofacial surgeons to review surgical results and discuss the best treatment options for upcoming cases. These relationships, not only with patients, but with referring doctors and orthodontists, contribute to this influx of orthognathic patients to Yale. Steinbacher and his team have drawn patients and queries not only from Connecticut and across the country, but from around the world, including South Africa and Brazil.

The surgeries vary in length. The procedure can last two or three hours if a single jaw is being altered, or as long as six hours for more comprehensive and complex procedures. “Both planning and surgical execution are critical to a successful result in orthognathic surgery,” said Steinbacher. Like rhinoplasty, orthognathic surgery straddles the sphere between functional/quality of life improvement and aesthetics/optimization of appearance.
Residents and faculty from institutions including New York University, Massachusetts General Hospital, Johns Hopkins, Yale, and the University of Connecticut attended the training session. Attendees received a broad perspective of approaches and treatment philosophy, using intra-operative video, case results, and lectures. The critical piece of the course was learning and honing surgical techniques in the anatomy lab. “Having the hands-on experience is critical,” said Steinbacher.

While the course was particularly useful to surgeons, Steinbacher said the attendees were diverse in their backgrounds. “It brought together people from orthodontics, maxillofacial surgery, and plastic surgery.” Steinbacher hopes to make the course an annual offering, as the demand for orthognathic surgery continues to grow at Yale. In the meantime, Steinbacher has a publication reporting on high-volume orthognathic surgery centers in the *Plastic and Reconstructive Surgery Journal*, and a forthcoming book on aesthetic orthognathic surgery and rhinoplasty.