Preface

Approaches to Craniosynostosis

Eric H. Hubli, MD, FACS, FAAP, FICS

1Department of Craniofacial Reconstruction, Cook Children’s Medical Center, Fort Worth, Texas


It is my privilege to serve as the guest editor for this issue of Seminars in Plastic Surgery, which is focused on the topic of craniosynostosis. I am excited to present a few new ideas as they relate to the management of this complex congenital condition. The phenotypic presentations associated with craniofacial sutural growth disturbances are well known and have been recognized for centuries. A quick review of surgical history reveals that the Barber surgeons of medieval Europe as well as 20th century scholars have all put forth treatment plans designed to ameliorate craniofacial deformities and their associated social stigma. Although the bravery of these early surgical pioneers was laudable, their surgical forays did not consistently restore a level of form and function that would be acceptable in our present beauty-centric society. Resting on the shoulders of the giants who preceded them, today’s surgeons are breaking new ground with respect to the management of craniofacial anomalies. A “result” is no longer an acceptable outcome; rather, the goal of today’s craniofacial surgeon must be to provide patients with a normal and natural look that blends in with the surrounding community. With this in mind, the ultimate postoperative compliment is no longer, “Who did your surgery?,” but the lack of comment that comes from a job so well done that no one recognizes that an intervention was performed. With this in mind, I am honored to present the work of the surgeons in this special issue.

We start with an approach to the management of metopic synostosis. In the approach presented, the authors advocate for the concept that sometimes “more is less.” The idea that is implied is that the standard approach of complete bandeau removal is not necessary for an excellent aesthetic result.

Britto et al provide a treatise related to the orbital issues in evidence when coronal sutures close. Management of the deformities associated with early closure of the coronal suture is perhaps the most challenging of all the craniosynostoses. Although cranial vault repair is a fairly straightforward affair comprised of bandeau advancement and limited reshaping of the frontal bone, the most vexing part of the procedure is associated with the orbital changes that accompany the sutureal closure. The team from Great Ormond Street does a masterful job of outlining the surgical options available in the management of orbital dystopia.

We then focus on the management of sagittal synostosis. Multiple surgical paradigms have been created to manage the scaphocephalic head, and each contribution advances the aesthetics of the final result. The functional aesthetic approach offers a dynamic solution to a significant problem.

Next, Drs. Rhodes, Tye, and Fearon discuss their approach to early closure of the lambdoidal suture. The lambdoid is the most infrequently affected cranial suture: It is because of the rarity of the presentation that this is a must read for the craniofacial practitioner.

Coming somewhat full circle, Dr. Honeycutt presents his results with strip craniectomy. The unique difference in this approach is the use of endoscopy and postoperative helmeting in an effort to decrease operative time, transfusion rates, and length of stay while maximizing aesthetic results.

Finally, Drs. Chim, Wetjen, and Mardini give us a glimpse of the future, presenting their experience with virtual surgical planning. If perfect aesthetics are the goal, then computer assistance will be a welcome ally as we attempt to go beyond the eye of the beholder.

I hope that you, our valued reader, will gain as much from this issue as I have. The thoughtfulness, insights, and ingenuity in evidence are inspirational; I hope that this text will give you a spark to push the boundaries of medicine beyond our present-day realities. These are exciting times and I am anxious to see what’s next.