INDICATION FOR OPERATION:, Right coronal synostosis with left frontal compensatory bossing causing plagiocephaly.,PREOPERATIVE DIAGNOSIS:, Syndromic craniosynostosis.,POSTOPERATIVE DIAGNOSIS: , Syndromic craniosynostosis.,TITLE OF OPERATION: , Anterior cranial vault reconstruction with fronto-orbital bar advancement.,SPECIMENS: , None.,DRAINS: , One subgaleal drain exiting from the left posterior aspect of wound.,DESCRIPTION OF PROCEDURE:, After satisfactory general endotracheal tube anesthesia was started, the patient was placed on the operating table in supine position with the head held on a horseshoe-shaped headrest and the head was prepped and draped down the routine manner. Here, the proposed scalp incision was infiltrated with 1% Xylocaine and then a zigzag scalp incision was made from one ear to the other ear, posterior to the coronal suture. Scalp incision was reflected anteriorly and then the periosteum was taken off of the bone and then the temporalis muscles were reflected anterolaterally until the anterior cranial vault was exposed and then the periorbital rim, nasion and orbital part of the zygomatic arch were all dissected out as well as the pterion. Using a craniotome, several bur holes were made; two on the either side of the midline posteriorly and then two posterolaterally. The two posterior bur holes were then connected with a punch over the superior sagittal sinus and then the craniotome was used to fashion a flap first on the left and then on the right, going paramedian along the superior sagittal sinus in the midline and then curving over the

fronto-orbital bar. We then dissected superior sagittal sinus off of the inner table of the right bundle flap and then connected the right bundle flap going across the pterion on the right, which was abnormal. The pterion on the right was then run short down after removing both bone flaps and then the dura was dissected off from the orbital roofs. On the right, the orbital roof was jagged and abnormal and we had to repair a CSF leak from where the dura was punctured by the orbital roof. The orbital rim was then dissected out and then using the saw and chisels, we were able to make the releasing cuts to free up the orbital rims, zygomatic arch and then remove the orbital bar going posteriorly and then the distal bar was split in the middle and then reapproximated with a bone graft in the middle to move the orbits out a little bit and the orbital bar was held together using absorbable plate. It was then replaced and advanced and then relaxing, barrel-staving incisions were made in the bone flaps and the orbital rim and it was held on the right side with an absorbable plate to fix it in the proper position. The bone flaps were then reapproximated using absorbable plates and screws, as well as #2-0 Vicryl to secure back into place. Some of the places were also secured in the midline posteriorly, as well as off to the right where the bony defects were in place. The periosteum was then brought over the skull and fastened in place and the temporalis muscles were tacked up to the periosteum. The wounds were irrigated out. A drain was left in posteriorly and then the wounds were closed in a routine manner using Vicryl for the galea and fast-absorbing gut for the skin followed by sterile

dressings. The patient tolerated the procedure well and did receive blood transfusions.