Clinical Protocol and 15 Year Experience of Caring for Postoperative Craniosynostosis Patients on the Ward

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INTRODUCTION: At Rady Children's Hospital in San Diego, we care for postoperative craniosynostosis patients (open and endoscopic) in the regular ward. This is a departure from international norms; in most craniofacial centers these children are cared for postoperatively in ICU's.[1] In the context of increasingly value driven healthcare, where each dollar spent is scrutinized for effectiveness, our experience shows that a less resource expensive postop setting for triaged craniosynostosis patients is safe and effective. Our purpose is to report our 15 year experience with a clinical protocol for postoperative surgical care of craniosynostosis patients (open and endoscopic) in the regular ward.

METHODS AND MATERIALS: In the last 18 months, 63 patients were identified as undergoing surgery (open=44 and endoscopic=19) for craniosynostosis. Patients undergoing onlay cranioplasty or minor procedures were excluded. Complete retrospective chart review includes the years 1999-2014 and the sample size is >700 patients.

RESULTS: In the last 18 months, 52 patients were managed postoperatively in the regular ward. 11 patients were sent to the ICU postoperatively, triaged to that higher level of care because of magnitude of intervention (including facial bipartition and macrocephaly reduction), concomitant medical comorbidties or difficult airway. No patients in the last 18 months initially managed on the floor required transfer to the ICU subsequently for deteriorating clinical status. No deaths occurred in the complete retrospective chart review, 1999-2014, and the n=>700 patients. Our specific protocol for managing craniosynostosis patients on the floor (including telemetry and timing of postoperative hematocrit checks) will be reviewed in the presentation.

CONCLUSIONS: In our 15 year experience, postoperative surgical care of appropriately triaged craniosynostosis patients (open and endoscopic) in the regular ward is safe and effective, requiring extremely rare escalation of care.

REFERENCES:

1. Seruya M, Sauerhammer T, Basci D, et al. Analysis of Routine Intensive Care Unit Admission Following Fronto-Orbital Advancement for Craniosynostosis. Plast Reconstr Surg. 2013;131: 582e-588e