Neonatal Craniosynostosis: Considerations

To the Editor:

We have read with great interest the note and image submitted by Amr E. Abouleish1 in relation to anesthetic management of neonatal craniosynostosis.

We agree with the author that the development of less invasive surgical techniques allows for surgical treatment of craniofacial pathologies at earlier ages.2,3 The aim of reducing the impact of chronic compression of the brain and compensatory mechanisms on the cranial vault and base of the skull appears to offset the theoretical risks of surgery at earlier ages.

In a quick review of our experience, of the 342 children and infants surgically treated at our unit for craniofacial pathology, we have identified 7 patients younger than 4 weeks; of these, 3 underwent surgery within the first 15 days of life, 1 at 8 days.

The author draws attention to challenges in airway management, although in our experience we have not found this a particularly complex problem. With regard to blood loss, also mentioned, we have not had to transfuse any patient during endoscopic remodeling procedures (six) and only two required blood derivatives in the immediate postoperative period. However, we do consider that patient positioning on the surgical table to be of the utmost importance. In our experience, our main concern is optimum positioning of the patient on the surgical table (fig. 1), depending on the pathology to be treated and the approach to be taken. Close collaboration between neurosurgeons and anesthesiologists is of primary importance to give maximum cranial exposure combined with the least possible compromise of venous drainage in an increasingly complex technical environment. This collaboration facilitates access, reduces surgery time, reduces bleeding from the dural sinus and offers maximum airway security. Like Dr. Abouleish, we think that the increasing frequency of surgery of this type at earlier ages is a challenge that requires particular consideration and planning by anesthesiologists.

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References

Fig. 1. Positioning of patients on the surgical table. Particular attention should be given to the exposure of the surgical field, elevation of the head to favor venous return, and careful subjection and protection of the endotracheal tube.