Patient specific “not” computer-assisted cranioplasty

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Sir,

We congratulate Dr. Bhargava et al. [1] for the development of another non-computerized technique for patient-specific cranioplasty and would like to add a few comments.

This paper describes a well-designed technique to produce a titanium bone flap replica without the use of computer numerical controlled technique. This is especially of important value for delayed cranioplasty as it is applied for decompressive craniectomies [2, 3]. Additionally, titanium has certain advantages such as greater stability and diminished toxicity and weight compared to other grafts such as polymethyl-methacrylat, hydroxy-apatite, or polyester. However, one disadvantage of the presented technique and computer-assisted model techniques is that the replica may not be available during the same surgical procedure in case of open skull fractures, bone flap tumor invasion, calcified hematomas, etc [4, 5]. We have recently described a cost-effective patient-specific intraoperative molded cranioplasty using polymethyl-methacrylat [4]. This technique provides an immediate patient-specific, single-stage reconstruction, and avoids a second operation.

We encourage Dr. Bhargava and colleagues to refine their technique in such a way that the titanium flap be made

available during the initial surgical procedure in order to enhance the frequency and feasibility of this promising technique.

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