Temporal hollowing

see Temporal hollowing after pterional craniotomy.

Temporal hollowing is a common but often overlooked complication following cranioplasty. To minimize temporal hollowing caused by temporal muscle contraction, we present the novel technique for temporal muscle resuspension during cranioplasty.

Methods: This is a retrospective case series which were done by a single surgeon at our university tertiary-A hospital between January 2019 and February 2020. The surgical technique was performed according to the forms of temporal muscle based on preoperative 3-D reconstruction and intraoperative images. All patients were followed up and evaluated on esthetic and functional outcomes.

Results: 17 patients with an average age of 39.35 years, frontotemporoparietal cranial defect size of 78.85 cm2, and median follow-up of 7 months were included. The main cause of decompressive craniectomy was trauma (n = 15). Techniques of temporal muscle augmentative resuspension were performed. The follow-up esthetic and functional outcome evaluation showed that all patients had good postoperative results. No revision surgery was found among the patients.

Conclusions: This study proposes methods of temporal muscle augmentative resuspension based on forms of the muscle. We believe this might be of use in minimizing temporal hollowing after cranioplasty [1)]

1)
Yang J, Yang X, Wang J, Yu H, You C, Ma L, Guan J. Surgical technique of temporal muscle resuspension during cranioplasty for minimizing temporal hollowing: A case series. Front Surg. 2022 Sep 23;9:996484. doi: 10.3389/fsurg.2022.996484. PMID: 36338643; PMCID: PMC9632970.