

# Ultra-early cranioplasty

The goal of the study of Sethi et al. was to ascertain the [efficacy](#), [safety](#), and [comparability](#) of ultra-early cranioplasty (CP; defined here as <30 days from the original [craniectomy](#)) to [conventional cranioplasty](#) (defined here as >30 days from the original [craniectomy](#)). A retrospective review of CPs performed between January 2016 and July 2020 was performed. Craniectomies initially performed at other institutions were excluded. Seventy-seven CPs were included in the study. Ultra-early CP was defined as CP performed within 30 days of craniectomy whereas conventional CP occurred after 30 days. Post-operative [wound infection](#) rates, rate of return to the [operating room](#) (OR) with or without bone flap removal, operative length, and rate of post-CP hydrocephalus were compared between the two groups. Thirty-nine and 38 patients were included in the ultra-early and conventional CP groups, respectively. The average number of days to CP in the ultra-early group was  $17.70 \pm 7.75$  days compared to  $95.70 \pm 65.60$  days in the conventional group. The mean Glasgow Coma Scale upon arrival to the emergency room was  $7.28 \pm 3.90$  and  $6.92 \pm 4.14$  for the ultra-early and conventional groups, respectively. The operative time was shorter in the ultra-early cohort than that in the conventional cohort (ultra-early,  $2.40 \pm 0.71$  h; conventional,  $3.00 \pm 1.63$  h;  $p = 0.0336$ ). The incidence of post-CP hydrocephalus was also lower in the ultra-early cohort (ultra-early, 10.3%; conventional, 31.6%;  $p = 0.026$ ). No statistically significant differences were observed regarding post-operative infection, return to the OR, or bone flap removal. The study shows that ultra-early CP can significantly reduce the rate of post-CP [hydrocephalus](#), as well as operative time in comparison to conventional CP. However, the timing of CP post-DC should remain a patient-centered consideration <sup>1)</sup>.

see [Hydrocephalus after decompressive craniectomy](#)

<sup>1)</sup>

Sethi A, Chee K, Kaakani A, Beauchamp K, Kang J. Ultra-Early [Cranioplasty](#) versus Conventional Cranioplasty: A Retrospective Cohort Study at an Academic Level 1 Trauma Center. Neurotrauma Rep. 2022 Aug 1;3(1):286-291. doi: 10.1089/neur.2022.0026. PMID: 36060455; PMCID: PMC9438438.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

[https://neurosurgerywiki.com/wiki/doku.php?id=ultra-early\\_cranioplasty](https://neurosurgerywiki.com/wiki/doku.php?id=ultra-early_cranioplasty)

Last update: **2024/06/07 02:59**

