

Revisiting Scalp block: Anaesthesia for Burrhole Craniotomy

Priya Chandran¹, Nikhila Venugopal² Letha J³

Dear Editor,

I am writing to highlight the evolving practice of awake craniotomy for the emergency evacuation of chronic subdural hematomas (SDH). Traditionally, such procedures have been performed under general anesthesia; however, recent evidence suggests that awake craniotomy, supplemented with a scalp block, could offer notable advantages in specific scenarios.¹

Awake craniotomy, in which the patient remains conscious but sedated, provides significant benefits, and potentially reduced systemic complications.² A key component of this technique is the use of a scalp block. This procedure not only enhances patient comfort but also significantly reduces intraoperative pain.³ This approach is particularly advantageous in emergency settings where rapid recovery is crucial for elderly patients.^{4,5}

We report a patient aged 88 admitted with decrease responsiveness and alleged history of slip and fall. She was diagnosed with left side chronic subdural hematoma posted for left side burrhole craniotomy. She does not have any known comorbidities or drug allergy. On general examination she was conscious, with GCS score of E4V5M5 with NIBP of 178/100, pulse rate of 60 with a weight of 40kg height 150cm. She has a MET score more than 4. Airway examination could not be assessed. System examination was found to be in normal limits. All the routine blood investigations were within normal limits. Preoperative fasting was 6 hrs. Advised high risk consent. Patient taken into emergency operative theatre. Baseline values were noted after attaching basic ASA monitors such as 5 lead ECG, pulse oximetry (Spo2), non-invasive blood pressure (NIBP). Intravenous lines were secured with 20G cannula in right upper limb, 16G cannula in right lower limb. Oxygen was administered with simple face mask with flow 6L/min. Premedicated with Inj midazolam 1mg iv, Inj Fentanyl 20 microgram iv, Inj ondansetron 4mg iv. Under strict aspiasis, scalp block given with 10ml 2% lignocaine and 15ml 0.5% Bupivacaine. Surgery started. Intraoperative period total intravenous anesthesia (TIVA) with Dexmedetomidine infusion at 14 microgram per hour and Fentanyl infusion at 5 microgram per hour were started. After dura closure TIVA was stopped. There were no hemodynamic fluctuations during the perioperative period. Surgery was over after 1 and half hours. Immediate postoperative GCS score improved with score of E4V5M6.

We encourage further research and discussion within the medical community regarding the benefits and optimal application of awake craniotomy and scalp blocks. By continually refining our techniques, we can enhance surgical outcomes and patient care in the treatment of chronic subdural hematomas.

Author's Affiliation: ¹Junior Resident, ²Senior Resident, ³Head of Department, Department of Anaesthesiology, Kottayam, Kerala, India.

Corresponding author: Priya Chandran, 1-637 Padmam house, Gandhinagar P.O. Kottayam, Kerala.

E-mail: priyachandran95@gmail.com



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