Anesthesia Meet-2018: SCALP Block in Elderly Patient with Heart Failure Undergo Sub Dural Drainage for Chronic Sub Dural Hematoma (CSDH): A Case report - Andri Nur Wahyudi -Brawijaya University, Indonesia

Andri Nur Wahyudi Brawijaya University, Indonesia

Ceaseless subdural hematoma (CSDH) is one of the most well-known neurosurgical conditions. There is absence of consistency in the treatment of CSDH among specialists regarding different treatment procedures. Clinical introduction may shift from no indications to obviousness. CSDH is typically analyzed by differentiate improved processed tomography check. CSDH by and large happens in older despite the fact that it might introduce in youthful patients. It might once in a while be found in newborn children. The nearness of two-sided CSDH in a newborn child raises the doubt of non-inadvertent injury and presents a troublesome demonstrative test due to the lawful and social ramifications. Glutaric aciduria type 1 ought to be considered in the differential analysis of reciprocal CSDHs in newborn children. Some CSDHs of outset may have an intrinsic etiology.

The CSDHs are generally on the most bended frontal or occipital convexity. Reciprocal CSDH is regular in patients with even frontal and occipital cranial vault. In unbalanced head, CSDHs are for the most part on the most bended frontal or occipital convexity which is all the more much of the time on the left side. In spite of the fact that CSDHs are for the most part on the convexities, interhemispheric CSDH can likewise be seen.

Disengaged third nerve paralysis may likewise be seen CSDH. Development issue, for in example. choreoathetoid and parkinsonism could be related with subdural hematomas (SDHs). Weight impacts, synapse variation from the norm, and ischemia have been proposed as purposes behind this kind of introduction. Older individuals experiencing subacute dynamic parkinsonism ought to experience processed tomography (CT) studies to separate it from essential parkinsonism. This Parkinsonism is normally totally relieved after fruitful departure of the hematomas. Catatonia could be seen in CSDH. A goal of the blepharospasm has been seen after departure of CSDH. CSDH can cause voiding dysfunctions with little bladder limit and high-abundancy overactive detrusor constrictions with an unblemished sphincteric reaction. Spinal CSDH may exist together with intracranial SDH. Attractive reverberation imaging (MRI) of the spine is shown in dubious patients with cranial CSDH. Attractive reverberation imaging (MRI) examine is increasingly delicate in the determination of reciprocal isodense CSDH, various loculations, intrahematoma films, crisp dying, hemolysis, and the size of container. Differentiation upgraded CT or MRI could distinguish related essential or metastatic dural ailments. Albeit positive history of injury could be acquired in a greater part of cases, a few cases might be optional to coagulation imperfection, intracranial hypotension, utilization of anticoagulants and antiplatelet drugs, and so on., Recurrent dying, expanded exudates from external layer, and cerebrospinal liquid entanglement have been ensnared in the growth of CSDH. Burr-gap clearing is the treatment of decision for a straightforward CSDH. A large portion of the ongoing preliminaries favor the utilization of channel to lessen repeat rate. Craniotomy and wind drill craniostomy additionally assume a job in the administration. Dural biopsy ought to be taken, particularly in repeat and thick external layer. Nonsurgical administration is held for asymptomatic or high usable hazard patients. The steroids and angiotensin changing over protein inhibitors may likewise assume a job in the administration. Single administration system isn't proper for all the instances of CSDH. Better comprehension of the idea of the pathology, reasonable determination of a perfect treatment methodology for an individual patient, and distinguishing proof of the benefits and impediments

of various careful procedures could help in improving the forecast.

Background

Chronic subdural hematoma (CSDH) is a very common clinical entity in neurosurgery. Both general anesthesia (GA) and local anesthesia with or without sedation are used for the surgical treatment of CSDH. In the case of patient with many complications, local Infiltration with sedation can be the best choice.

Objectives

The main objective management of this case is to achieve a safe anesthesia with minimal interference in Elderly patient with comorbid of Heart problem (Heart failure, low ejection fraction 44%, moderate aortic regurgitation). SCALP block with sedation is an option for CSDH in elderly patient with heart failure undergo burr hole and evacuation of chronic subdural hematoma.

Case Report

An 82-year-old 65 kg and 168cm height male admitted to Saiful Anwar General Hospital due to decrease of consciousness with glasgow coma scale (GCS) 446.

Computerized tomography (CT) of the brain revealed a hypodense chronic subdural hematoma in the left frontoparietal area without midline shift. Echocardiography shows ejection fraction 44%, diastolic dysfunction, left eccentric hypertrophy, aortic regurgitation moderate, posterior mitral leaflet immobile, hypokinetic anterior, anterolateral, inferior lateral and inferior segment.

Methode

Patient received IV bolus of dexmedetomidine 1 mcg/kg over 10 minute followed by maintenance infusion 0.5 mcg/kg/h). Then scalp block was given with 20 mL of 0.75% ropivacaine without adrenaline (3-4 mL for each nerve) to block the supratrochlear, supraorbital, zygomaticotemporal, auriculotemporal, greater and lesser occipital nerve.

Patient was monitored for heart rate (HR), mean blood pressure (MBP), electrocardiogram and peripheral

oxygen saturation (SpO₂). The oxygen was provided through a facial mask at 3 L/ min with end-tidal carbon dioxide monitoring. At the time of the burr hole until finish operation, no additional drug was given. The procedure lasted for 30 min and the intraoperative course was uneventful, with maintenance of hemodynamic parameters. Richmond agitation sedation score ranged from -1 to -3 during the operation.

Result

Scalp block with sedation given by dexmedetomidine provide anesthesia technique in term of (sedation and analgesia) for burr hole and evacuation of chronic subdural hematoma with co-morbid of geriatric age with heart failure.

Discussion and conclusion

The scalp block is indicated in intracranial and extra cranial procedures. It has been previously used in cranial surgeries. As described by Pinosky et al 6 nerves are involved and subsequently infiltrated with volumes of local anesthetic ranging from 2 to 5ml. Dexmedetomidine is centrally acting a2 agonist, considered to provide "co-operative sedation," anxiolysis and analgesia without causing respiratory depression. Scalp block with dexmedetomidine sedation is a safe and effective technique for burr hole and evacuation of CSDH. It is associated with significantly shorter operative time. lesser hemodynamic fluctuations during anesthesia procedure due to minimal use of anesthetic agent, and minimal drug interaction.