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## Outcome Analysis of Surgical and Nonsurgical Treatment on Indicated Operative Chronic Subdural Hematoma: Serial Case in Cipto Mangunkusumo Hospital Indonesia

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Abstract: Chronic subdural hematoma (cSDH) is a common condition after head trauma. Although the size of the thickness of cSDH has an important role in the decision to perform surgery, but the size limit of the thickness is not absolute. In this serial case report, we evaluate three case report of cSDH that indicated to get the surgical procedure because of deficit neurologic and neuroimaging finding with subfalcine herniation more than 0.5 cm and hematoma thickness more than one cm. On the first case, the patient got evacuation hematoma procedure, but the second and third case, we did nonsurgical treatment because the patient and family refused to do the operation. We did the conservative treatment with bed rest and mannitol. Serial radiologic evaluation is done when we found worsening condition. We also reevaluated radiologic examination two weeks after the treatment. The results in this serial case report, the first and second case have a good outcome. On the third case, there was a worsening condition, which in this patient there was a comorbid with type two diabetic mellitus, pneumonie and chronic kidney disease. Some conservative treatment such as bed rest, corticosteroid, mannitol or the other hyperosmolar has a good outcome in patient without neurologic deficits, small hematoma, and or patient without comorbid disease. Evacuate hematome is the best choice in cSDH treatment with deficit neurologic finding. Afterall, there is some condition that we can not do the surgical procedure. Serial radiologic examination needed after two weeks to evaluate the treatment or if there is any worsening condition.

**Keywords:** chronic subdural hematoma, traumatic brain injury, surgical treatment, nonsurgical treatment, outcome **Conference Title:** ICTBIBA 2017: International Conference on Traumatic Brain Injury and Biomedical Applications

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