



Letter to the editor

Seizures and epilepsy following cranioplasty

To the Editor

We read with great interest the study by Shih et al [1] regarding the risk factors for seizures after cranioplasty. The article is well written and the authors have concluded that delayed cranioplasty procedures and seizures before cranioplasty were significantly associated with early post-cranioplasty seizures. We really appreciate the interesting research for their conclusion would believe it to be useful to make a treatment decision and prevent seizures in advance in cranioplasty patients. However, after reading this article, we would like to highlight 2 important questions that it raises.

Firstly, in their study, seizures (73/238, 30.3%) were the most common complication after cranioplasty. From most previous studies, it seems that post-operative infection is the most common complication. In fact, many people, including us, may confuse seizures and epilepsy. Epilepsy is a group of neurological disorders characterized by epileptic seizures. Epilepsy is when the patient has recurrent seizures due to an underlying disease of the brain. A person may have only one seizure in their whole life. But a person has epilepsy when he or she has seizures more than once. Seizures are signs of epilepsy but not all seizure-like symptoms are due to epilepsy.

In addition, we also reviewed the incidence of epilepsy after cranioplasty in previous articles and compared it with the study in Shih et al [1]. Malcolm et al [2] reported a systematic review and meta-analysis with 25 articles and 3126 patients, they found that the incidence of epilepsy was only 6.1% (n = 39/643), which was also significantly lower than the infection rate and bone resorption rate. Zanaty et al [3] reported a retrospective study with 12 years and 348 patients, they found that the infection rate (26.43%) was also significantly

higher than that of epilepsy (14.37%). In a 10.75-year and 754 patients' study, Morton et al [4] found the incidence of epilepsy was 4.1%, which was also lower than complications such as infection and hydrocephalus.

Conflict of interest statement

We certify that we have no affiliations with any organization or entity with any financial interest or non-financial interest.

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