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## Letter to the editor

### Neurosurgery in viral encephalitis: Application of decompressive craniectomy in medical diseases



*Neurochirurgie dans l'encéphalite virale : application de la craniectomie décompressive à des maladies*

We read with interest the article: “Multimodal management of severe herpes simplex virus encephalitis: a case report and literature review” published in a recent issue of *Neurochirurgie* [1]. The authors present a favorable resolution of a patient with viral encephalitis due to herpetic virus that was subjected to decompressive craniectomy. Herpes simplex virus infection is one of the most common causes of mortality related with sporadic cases of encephalitis in humans [2].

Evidence supporting the surgical management of herpetic encephalitis associated with refractory intracranial hypertension is of low quality. Based on the use of decompressive craniectomy in brain trauma and its widespread use for the control of elevated intracranial pressure, several reports in the literature support the application of this procedure in complex cases [3].

The usefulness of decompressive craniectomy in other cases of neuroinfections by different microorganisms (*Streptococcus pneumoniae*, *Neisseria meningitidis*, *Mycoplasma pneumoniae*, *Listeria monocytogenes*, and *Toxoplasma gondii*) has previously been described [4,5]. The pharmacological measures anti-cerebral edema should be the first line strategy, when these measures fail surgical management in severe herpes simplex virus should be considered.

In patients with herpetic encephalitis mortality has been estimated in 70% and only 3% can be sent home without any sequelae [5]. The time of diagnosis and the age of the patients will determine, in part, the presence of sequelae.

This case suggests that decompressive craniectomy is a surgical technique associated with effective temporal lobectomy for the management of refractory intracranial hypertension in selected cases of herpetic encephalitis. The neurointensive management of the patient with herpetic encephalitis is very important for successful resolution. The early establishment of antiviral therapy will be the most relevant aspect for the outcome.

### Disclosure of interest

The authors have not supplied their declaration of competing interest.

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Received 30 May 2018

Received in revised form 4 August 2018

Accepted 16 October 2018  
Available online 8 November 2018