Decompressive craniectomy for the treatment of severe cerebral edema at a reference hospital for neurotrauma in Brazil

Traumatic brain injury remains the leading cause of death and long-term disability in people younger than 40 years worldwide. In some developing countries such as Brazil, neurotrauma is the most common major disorder that neurosurgeons are called on to treat. Assessment of the extent of structural damage is commonly performed according to the Marshall CT classification. Hospital Urgencia Otavio Lage (HUGOL) is a reference hospital for neurotrauma in a big city in Brazil. It is responsible for the healthcare of up to 4 million people. We preceded 147 neurosurgeries related to head trauma, such as epidural and subdural hemorrhage, skull fracture, intraparenchymal hemorrhage, decompressive craniectomy during 7 months, from July 2015 to January 2016. The majority causes of head injury were traffic accidents, especially motorcycle accidents and physical aggression, especially penetrating head injury by civilian gunshot, which are high impact mechanisms of trauma. According to the guideline from Neurotrauma Brazil, all the 31 patients with severe cerebral edema (Marshall IV) and Glasgow over then 3 underwent decompressive craniectomy. They were 21% of the patients operated on the hospital during the period, showing us that severe traumatic cerebral edema has a high incidence in developing countries and the neurosurgeons need to be prepared to deal with it.

Biography

Dionisio Figueiredo Lopes is a neurosurgeon member of Brazilian Neurosurgery Society. He is a member of Brazilian Neurosurgery Academy, Head of Neurosurgery at Hospital Urgencia Otavio Lage and consultant at Hospital Urgencia Goiania and Hospital Santa Monica. He received Fellowship in Neuro-oncology at Dresden, Germany and fellowship in Advanced Techniques in Neurosurgery at Tubingen, Germany.

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