

Functional hemispherectomy/hemispherotomy is a **disconnection procedure** for **severe medically refractory epilepsy** where the seizure foci diffusely localize to one **hemisphere**. It is an improvement on anatomical **hemispherectomy** and was first performed by Rasmussen in **1974**. Less invasive surgical approaches and refinements have been made to improve seizure freedom and minimize surgical **morbidity** and **complications**. Key anatomical structures that are disconnected include the 1) **internal capsule** and **corona radiata**, 2) **mesial temporal** structures, 3) **insula**, 4) **corpus callosum**, 5) **parietooccipital connection**, and 6) frontobasal connection. A stepwise approach is indicated to ensure adequate **disconnection** and prevent seizure persistence or recurrence. In young pediatric patients, careful patient selection and modern surgical techniques have resulted in > 80% seizure freedom and very good functional outcome. Young et al. summarized the history of **hemispherectomy** and its development and present a graphical guide for this anatomically challenging procedure. The use of the **osteoplastic** flap to improve outcome and the management of **hydrocephalus** are discussed ¹⁾.

¹⁾

Young CC, Williams JR, Feroze AH, McGrath M, Ravanpay AC, Ellenbogen RG, Ojemann JG, Hauptman JS. Pediatric functional hemispherectomy: operative techniques and complication avoidance. Neurosurg Focus. 2020 Apr 1;48(4):E9. doi: 10.3171/2020.1.FOCUS19889. PubMed PMID: 32234987.

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