Decompressive craniectomy classification

Depending on the location of the affected area, different surgical decompression techniques have been developed. In the presence of diffuse brain edema without a midline shift, as commonly seen in traumatic brain injury, bilateral (eg, bifrontal) craniectomy has been advocated. Hemicraniectomy, or removal of a frontotemporoparietal bone flap, is suitable in patients with unilateral hemisphere swelling as seen after ischemic stroke [1].

Accumulating experience over the years has led to increasing refinement of the surgical technique. The size of the removed bone fragment has been recognized as a factor of crucial importance for the generation of a sufficient decompressive effect [2].

see Hemicraniectomy- Unilateral decompressive craniectomy

see Bifrontal decompressive craniectomy

see Decompressive craniectomy for infants

see Suboccipital Decompressive Craniectomy

1)
Hutchinson P, Timofeev I, Kirkpatrick P. Surgery for brain edema. Neurosurg Focus.2007;22:E14
2)
Wagner S, Schnippering H, Aschoff A, Koziol JA, Schwab S, Steiner T. Suboptimum hemicraniectomy as a cause of additional cerebral lesions in patients with malignant infarction of the middle cerebral artery. J Neurosurg.2001;94:693–696