# 2012

2011-2013.

The glymphatic system is a network in the brain responsible for clearing waste products and toxins from the central nervous system (CNS). It was first described in 2012 and has since been a significant area of study in neuroscience.

---

Guidelines for the acute medical management of severe traumatic brain injury in infants, children, and adolescents [1)]

---

The Quality Outcomes Database was established in 2012 by the NeuroPoint Alliance a nonprofit organization supported by the American Association of Neurological Surgeons. Currently, the QOD has launched six different modules to cover a broad spectrum of neurosurgical practice-namely lumbar spine surgery, cervical spine surgery, brain tumor, stereotactic radiosurgery (SRS), functional neurosurgery for Parkinson's disease, and cerebrovascular surgery [2)].

---

In 2012, the American Heart Association and the American Stroke Association published updated evidence-based guidelines on the comprehensive management of aneurysmal subarachnoid hemorrhage (aSAH), including the management of cerebral vasospasm and delayed cerebral ischemia (DCI).

---

The use of frameless stereotactic robotic technology has rapidly expanded since the Food and Drug Administration's approval of the Robotic Surgical Assistant (ROSA™) in 2012.

---

In the year 2012, Chinese Glioma Genome Atlas (CGGA) was built, which represented a landmark to glioma research in China. And this will provide massive amounts of data for the research both in basic and clinical research of gliomas.

---

Stent retrievers, approved by the U.S. Food and Drug Administration in 2012 The Solitaire Flow Restoration Device was approved by the FDA in 2012 for mechanical thrombectomy of proximal occlusion of intracranial arteries.

---

2012: Thieme launches Thieme eNeurosurgery at CNS meeting in fall, 2012

Jain in 2012 wanted to know the situation in an Indian centre. Data regarding age, sex, affected side, mode of injury, distribution of paralysis, associated injuries, pain at the time of presentation and the index procedure they underwent were collected from 304 patients. Additional data like the vehicle associated during the accident, speed of the vehicle during the accident, employment status and integration into the family were collected in 144 patients out of the 304 patients.

Road traffic accidents accounted for 94% of patients and of the road traffic accidents 90% involved two wheelers. Brachial plexus injury formed a part of multitrauma in 54% of this study group and 46% had isolated brachial plexus injury. Associated injuries like fractures, vascular injuries and head injuries are much less probably due to the lower velocity of the vehicles compared to the western world. The average time interval from the date of injury to exploration of the brachial plexus was 127 days and 124 (40.78%) patients presented to us within this duration. Fifty-seven per cent had joined back to work by an average of 8.6 months. It took an average of 6.8 months for the global brachial plexus-injured patients to write in their non-dominant hand [3].

1)
Kochanek PM, Carney N, Adelson PD, Ashwal S, Bell MJ, Bratton S, Carson S, Chesnut RM, Ghajar J, Goldstein B, Grant GA, Kissoon N, Peterson K, Selden NR, Tasker RC, Tong KA, Vavilala MS, Wainwright MS, Warden CR; American Academy of Pediatrics-Section on Neurological Surgery; American Association of Neurological Surgeons/Congress of Neurological Surgeons; Child Neurology Society; European Society of Pediatric and Neonatal Intensive Care; Neurocritical Care Society; Pediatric Neurocritical Care Research Group; Society of Critical Care Medicine; Paediatric Intensive Care Society UK; Society for Neuroscience in Anesthesiology and Critical Care; World Federation of Pediatric Intensive and Critical Care Societies. Guidelines for the acute medical management of severe traumatic brain injury in infants, children, and adolescents–second edition. Pediatr Crit Care Med. 2012 Jan;13 Suppl 1:S1-82. doi: 10.1097/PCC.0b013e31823f435c. Erratum in: Pediatr Crit Care Med. 2012 Mar;13(2):252. PMID: 22217782.
2)
Asher AL, Haid RW, Stroink AR, Michalopoulos GD, Alexander AY, Zeitouni D, Chan AK, Virk MS, Glassman SD, Foley KT, Slotkin JR, Potts EA, Shaffrey ME, Shaffrey CI, Park P, Upadhyaya C, Coric D, Tumialán LM, Chou D, Fu KG, Knightly JJ, Orrico KO, Wang MY, Bisson EF, Mummaneni PV, Bydon M. Research using the Quality Outcomes Database: accomplishments and future steps toward higher-quality real-world evidence. J Neurosurg. 2023 May 19:1-19. doi: 10.3171/2023.3.JNS222601. Epub ahead of print. PMID: 37209070.
3)
Jain DK, Bhardwaj P, Venkataramani H, Sabapathy SR. An epidemiological study of traumatic brachial plexus injury patients treated at an Indian centre. Indian J Plast Surg. 2012 Sep;45(3):498-503. doi: 10.4103/0970-0358.105960. PubMed PMID: 23449838; PubMed Central PMCID: PMC3580349.