Finland

In Finland, highly demanding neurosurgical operations are only performed in university hospitals that have advanced intensive care units and can offer the patient a full range of specialist services including neuroanesthesiology, neuroradiology, neuropathology, neurology, pediatric neurology, clinical neurophysiology, neuro-otology and neuro-ophthalmology.

Hospitals

Helsinki

Kuopio

Tampere

Oulu.

Turku

Between 1999 and 2015, the operative techniques used for degenerative cervical spine diseases changed from prevalently decompressive to utilizing anterior cervical decompression and fusion (ACDF), in 68.8 to 91.0% of the operations, depending on the treating hospital. ACDF became the most commonly applied technique for all degenerative diagnoses except atlanto-axial subluxation [1)].

Traumatic brain injury epidemiology in Finland

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Craniosynostosis

Craniosynostosis is a prevalent craniofacial malformation in Finland; however, comprehensive population-based epidemiological data are limited. This study aimed to estimate the total and birth prevalence of craniosynostosis in Finland from 1987 to 2010 and examine temporal trends.

Vuola et al. collected the data from nationwide registers maintained by the Finnish Institute for Health and Welfare and Statistics Finland, as well as treating hospitals, encompassing live births, stillbirths, terminations for fetal anomalies, and infant deaths with suspected or diagnosed craniosynostosis or skull deformation. A craniofacial surgeon and a clinical geneticist reviewed 1878 medical records for diagnostic confirmation.

Results: Out of 877 craniosynostosis cases, 83% were single-suture synostoses (all live births), 10% craniosynostosis syndromes, and 7% multisutural non-syndromic synostoses. Live birth prevalence from 1987 to 2010 was 6.0/10,000 live births, ranging from 5.0/10,000 in 1987 to 7.5/10,000 in 2010. Total prevalence, including live births, stillbirths, and terminations, varied from 5.0/10,000 in 1987 to 8.0/10,000 in 2010. Sagittal synostosis was the most common synostosis, with a prevalence of

3.9/10,000 live births, followed by metopic (0.6/10,000), unicoronal (0.4/10,000), and unilambdoid (0.1/10,000) synostoses.

The total combined prevalence of all craniosynostosis types significantly increased driven by a nonsignificant rise across all subgroups and a significant increase in the syndrome group. In live births increase was significant only within the syndrome subgroup, primarily due to an increase in Muenke syndrome patients. The rising prevalence of syndromes necessitates further investigation. Contrasting with trends in Europe, Australia, and the USA, Finland showed no significant increase in metopic craniosynostosis [2)]

1)
Kotkansalo A, Malmivaara A, Korajoki M, Korhonen K, Leinonen V. Surgical techniques for degenerative cervical spine in Finland from 1999 to 2015. Acta Neurochir (Wien). 2019 Aug 10. doi: 10.1007/s00701-019-04026-9. [Epub ahead of print] PubMed PMID: 31401738.
2)
Vuola P, Pakkasjärvi N, Ritvanen A, Heliövaara A, Tukiainen E, Gissler M. Prevalence of craniosynostosis in Finland, 1987-2010: A population-based study. Birth Defects Res. 2024 Feb;116(2):e2319. doi: 10.1002/bdr2.2319. PMID: 38348760.