

Pediatric intracranial tumor complications

Factors associated with new postoperative neurological deficit (POND) were [mannitol](#) use and to certain extent massive [blood transfusion](#) (MBT). The variables associated with prolonged LOHS were reintubation and to certain extent POND. The anaesthetic technique, location of tumour, tumour [histology](#) and [extent of tumor resection](#) did not influence the occurrence of new POND or prolonged [length of stay](#) (LOHS) in infantile intracranial tumour surgery. Further prospective studies with larger sample size are required for confirmation of these findings and identification of new peri-operative risk factors ¹⁾.

A study investigated the long-term endocrine effects of childhood-onset brain tumors in a large number of patients. This study included 151 patients with brain tumors diagnosed between January 1995 and December 2016. The following data were retrospectively reviewed: tumor location, tumor histology, endocrine abnormalities, hypothalamic involvement on brain imaging, treatment modalities, and trends in body mass index. The mean age at diagnosis of patients with sellar/suprasellar (SE/SUP-SE) tumors and supra/infratentorial (ST/IT) tumors was 9.9 ± 4.5 and 6.5 ± 4.2 years, respectively. In patient with prepubertal age at diagnosis, height standard deviation score was lower in patients with SE/SUP-SE tumors at diagnosis ($P = 0.031$), which was lower in patients with ST/IT tumors at the final visit ($P < 0.001$). The prevalence of combined pituitary hormone deficiencies was higher among patients with SE/SUP-SE tumors than in those with ST/IT tumors (81.7 vs. 36.1%, $P < 0.001$). Among 98 non-obese patients with SE/SUP-SE tumors, 36.7% developed obesity. The prevalence of combined pituitary hormone deficiencies and obesity was higher in patients with SE/SUP-SE tumors than in those with tumors in other locations; growth impairment was more severe in patients with ST/IT tumors ²⁾.

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Gopalakrishna KN, Chakrabarti D, Sadashiva N, Bharadwaj S, Bhat R, Sudhir V. Perioperative factors affecting neurological outcome in infants undergoing surgery for intracranial lesion: A retrospective study. *World Neurosurg.* 2019 Jul 3. pii: S1878-8750(19)31853-4. doi: 10.1016/j.wneu.2019.06.196. [Epub ahead of print] PubMed PMID: 31279108.

²⁾

Seo GH, Choi JH, Kim YM, Koh KN, Im HJ, Ra YS, Yoo HW. Long-term endocrine effects and trends in body mass index changes in patients with childhood-onset brain tumors. *J Neurooncol.* 2018 Jan 19. doi: 10.1007/s11060-018-2765-0. [Epub ahead of print] PubMed PMID: 29352447.

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