India

In India, there are 2 types of training in neurosurgery: (1) a 3-year program for those trainees who have undergone postgraduate training in general surgery and (2) a 5-year program for those who opt for neurosurgical training immediately after medical graduation. The qualification MCh (neurosurgery) degree is awarded by the universities or the institutes. There is also a national-level examination offered by the National Board of Examinations (India), leading to diplomat of national board qualification. The 5-year training program includes 1 year of training in general surgery and training in neurology, neuroradiology, neuropathology, and neurosurgery. The trainees have to work on a research project and submit a dissertation or thesis at the time of final examination.

However, there are several problems and pitfalls in neurosurgical training. (1) There is no uniform standard in the neurosurgery training. Some centers are well equipped with state-of-the-art technology; some centers lack the facilities. This is mainly due to the paucity of funds because most of these are funded by the government. (2) There is a lack of uniformity in the training curriculum; some institutions have a structured graded training program, but in many places this is lacking. (3) There is a lack of subspecialty training in most places. (4) There is no uniformity in the standard of examinations; each university or institute has its own pattern and standard of examination. (5) There is no provision for postqualification training in most places, which is so essential for honing one's surgical skills.

The advent of the National Board of Examinations has mitigated the problem of uniformity of the standard of qualifying examinations to some extent. The Medical Council of India, the National Board of Examinations, and the Neurological Society of India are striving hard to ensure a uniform, high standard of neurosurgical training.

Hospitals

Bengaluru (Bangalore).

Bhubaneswar

Chandigarh

Gurugram

Kochi

Department of Neurosurgery, S.C.B. Medical College, Cuttack, Odisha, India.

Manipal

New Delhi

Post Graduate Institute of Neurological Surgery, Dr. A. Lakshmipathi Neurosurgical Centre, Voluntary Health Services Hospital, Chennai, Tamil Nadu, India.

Department of Neurosurgery, Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER), Pondicherry, 605006, India.

Rishikesh

In India, half of the annual 200,000 road traffic deaths occur in hospitals, but the exact in-hospital trauma mortality rate remains unknown. A research consortium of universities, with a mandate to reduce trauma mortality, measured the baseline 30-day in-hospital mortality rate.

Between September 2013 and February 2015, trained data collectors collected on-admission demographic, physiological vital signs, and health service performance indicators (time of injury to admission, investigation, or intervention) on all patients with traumatic injuries admitted to four public university hospitals in three Indian megacities.

Of the 11,202 hospitalized trauma patients, 21.4 % died within 30 days of hospitalization. The median age was 30 years for survivors and 37 years for non-survivors. The on-admission systolic blood pressure and Glasgow Coma Score was near-normal in survivors, but was significantly lower in non-survivors and associated with both early and late mortality ($p = 0.001$). In the absence of a trauma system, there were process-of-care delays from injury to reaching and being examined, investigated, or operated in the hospital.

Using a multi-institutional Indian registry, this study is the first to systematically document that the 30-day in-hospital trauma mortality was twice that found in similar registries from high-income countries. Physiological scoring of on-admission vitals was clinically useful to predict mortality. More research is needed to understand the causes of high mortality and time delays in the process of delivering trauma care in India, which has no prehospital or trauma system [1].

Few studies are available from India which show a lower incidence of brain tumours compared to the developed countries. Not much is known about the epidemiology of brain tumours in the population from South India. AIM: To identify the age groups, gender distribution, topography and different histological types of brain tumours.

A total of 510 cases of brain tumours were identified over a period of seven years which were included in the present study. We retrieved the slides of these cases and reviewed them. Immunohistochemistry in required cases were done. Age and gender distribution, clinical presentation, site of tumour and histopathologic patterns with grade were noted and the data was analysed with SPSS software version 17.0.

The analysis showed that most of the brain tumours occur between 40-60 years of age, with a male to female ratio of 0.9:1. Majority of cases involved dura and cerebral lobes except for the occipital lobe, and meningioma and glial tumours were the most common broad histological types. WHO grade IV tumours and metastases were common in males compared to females.

This study revealed the distribution of brain tumours in patients attending our institution. The results obtained were comparable with available worldwide data [2].

1)
Roy N, Gerdin M, Ghosh S, Gupta A, Kumar V, Khajanchi M, Schneider EB, Gruen R, Tomson G, von Schreeb J. 30-Day In-hospital Trauma Mortality in Four Urban University Hospitals Using an Indian

Trauma Registry. World J Surg. 2016 Jun;40(6):1299-307. doi: 10.1007/s00268-016-3452-y. PubMed PMID: 26911610.

2)

Thambi R, Kandamuthan S, Sainulabdeen S, Vilasiniamma L, Abraham TR, Balakrishnan PK. Histopathological Analysis of Brain Tumours- A Seven Year Study from a Tertiary Care Centre in South India. J Clin Diagn Res. 2017 Jun;11(6):EC05-EC08. doi: 10.7860/JCDR/2017/25623.9990. Epub 2017 Jun 1. PubMed PMID: 28764170; PubMed Central PMCID: PMC5535363.