

## Introduction

In last few decades several advances have occurred in the field of neuro-oncology. Pragmatic approach and judicious clinical decisions are of paramount significance to chose investigations and therapeutic interventions. This study aims to review the recent advances in the management of CNS tumors and audit neurosurgical treatment of patients at a tertiary neuropsychiatric center. Clinical audit provides an opportunity for the clinical team to rectify and modify the steps of the clinical care and improve documentation.

## Methods

This study was conducted in neurosurgery department of a tertiary care neuropsychiatry hospital in Delhi, India. Fifty patients of CNS tumors were selected by the non-probability convenience sampling for the study. These patients were operated between January 2008 and February, 2016 by the first author. Medical charts, operative notes, imaging studies, follow up records of chemotherapy and radiotherapy were reviewed and analyzed. 16 standards were defined for the comparison for any deviation from the standard protocol based on evidence based medical practice and local guidelines.

Data were collected by a clinical audit team of hospital on this particular topic and analyzed in MS Excel and SPSS. The statistical output was represented as frequencies and percentages of the diagnosis, surgical procedures and findings were summarized.

## Results

16 Standards of clinical audit involved pre operative evaluation, pre anesthetic check up, neuro-imaging, informed consent, neurosurgical intervention,per operative neuroanesthetic monitoring, per operative frozen section biopsy,histopathological examination, andpost operative evaluation. The age of 50 patients ( 33 males and 17 females) ranged from 9 years to 78 years. The data of 42 Brain and 8 spinal tumors were analyzed against the set of standards.

## Conclusions

The incidence of brain metastases is rising due early detection, better treatment of systemic malignancy and longer span. Pre operative neurological status of the patient, histological grade of the tumor guides the treatment of supra tentorial gliomas. The choice of neuroimaging and treatment modality and long term follow up involves a multidisciplinary team approach. The purpose of clinical audit is the systematic review of standard of clinical care. Clinical audit is a quality improvement cycle.

## Learning Objectives

Multidisciplinary care and clinical audit of clinical care is necessary to improve the quality of neurosurgical intervention.

## References

- 1.Pant I, Chaturvedi S, Singh Gautam VK, Kumari R. Intramedullary meningioma of spinal cord: case report of a rare tumor highlighting the differential diagnosisof spinal intramedullary neoplasms. Indian J of Pathol and Microbiol,2014;57:308-10
- 2.Gautam VKS, Singh R, Khurana S, Srivastava A.Reviewing neurosurgical management of brain metastases: Three case reports. International Journal of Medicine,2014, 2(2), 87-90.
3. WHO classification of CNS Tumors, 2007
4. <http://www.nice.org.uk/guidance>

[Default Poster]