





EPIDEMIOLOGY OF ADULT TYPE DIFFUSE GLIOMA AT THE NATIONAL BRAIN CENTER HOSPITAL IN 2020-2022

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OBJECTIVES

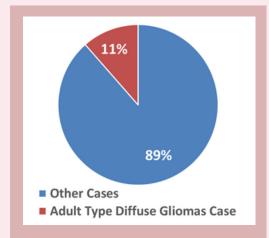
Brain and other central nervous system (CNS) tumors are among the most fatal cancers and account for substantial morbidity and mortality. Incidence of primary malignant brain and other CNS was reported to be increasing among all age groups. The fifth edition of the World Healt Organizatioan (WHO) classification of tumour of CNS features several change in the clasification, diagnostic criteria, nomenclature, and grading of diffuse glioma. Adult type diffuse glioma are genetically defined and include astrocytoma, isocitrate dehydrogenase (IDH)-mutant, oligodendroglioma IDH-mutant and 1p/19q codeletes, and glioblastoma, IDH-wildtype. This review a simplified approch to the diagnosis of these tumors is provided.

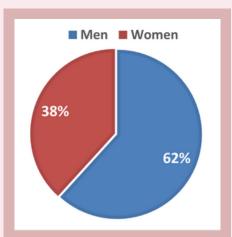
METHODOLOGY

Data on primary CNS tumors diagnosed in 2020 until 2022 were The National Brain Center Hospital. We would record age, sex, tumor location, histological type, for molecular assessment not all adult type diffuse glioma tumors have been examined

RESULTS

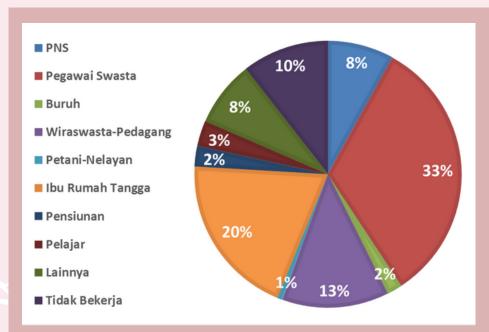
The number of adult type diffuse glioma cases from 2020-2022 is 162 cases (11%) out of 1250 cases. Men more than women (62%). Most ages 50-59 years (30%) and at least > 70 (4%) cases. The location of the tumor is almost 100% supratentorial. Meanwhile, the most residential locations are in Jakarta (36%), followed by West Java (52%) and Banten (24%). Based on occupation, most are private employees (33%) and the least are farmers/fishermen (1%).

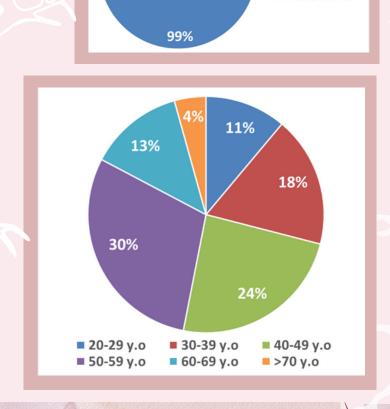




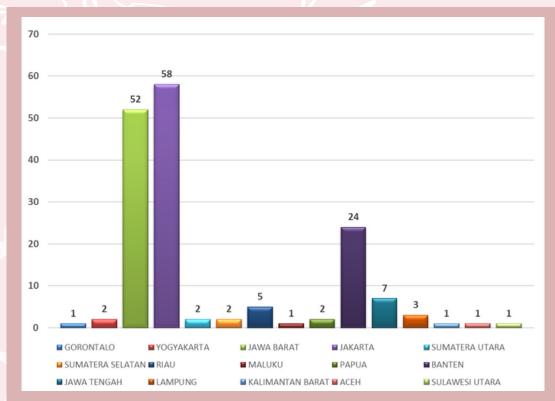
Supratentorial

Infratentorial





1%



CONCLUSIONS

Currently the reported diagnosis has not been based on the molecular pathological features recommended by WHO CNS5. One of the reasons is that there is no state/government insurance guarantee that can cover diagnostic financing.

REFERENCES

- 1. Whitfield, B.T, Huse, J.T. Classification of adult-type diffuse gliomas: Impact of the World Health Organization 2021 update. Brain Pathology. 2022: 32:el13062
- 2. Branger, D.F, Paula, A.M., Colin, C., Bouvier, C., Histomolecular classification of adult diffuse gliomas: The diagnostic value of immunohistochemical markers. Elsevier Massson.2011:683-690
- 3. Lee, C.H., Jung, K.W., Yoo, H., et.al. Epidemiology of Primary Brain and Central Nervous System Tumors in Korea. J. Korean Neurosurg. 2010 Soc 48: 145-152
- 4. Miller, K.D., Ostrom, Q.T., Kruchko, C., et.al. Brain and Other Nervous System Tumor Statistics, 2021. CA CANCER J CLIN. 2021. 71:381-406