Prevalence Of Glioblastoma-NOS Based On Clinical Manifestations And Histopathology Findings In Main Tertiary Referral Hospital In XXX

Hendrikus Bolly¹, Firman Priguna², Ahmad Faried³, Muhammad Zafrullah Arifin³, Akhmad Imron³

¹Department Of Neurosurgery/ Faculty Of Medicine Universitas Padjadjaran/ Indonesia
²Neurosurgery/ Hasan Sadikin Hospital-Faculty Of Medicine Universitas Padjadjaran/ Indonesia,
³Department Of Neurosurgery/ Hasan Sadikin Hospital-Faculty Of Medicine Universitas Padjadjaran/ Indonesia,

Purpose
Glioblastoma is the one of malignant primary and lethal tumor of brain. The main challenges of glioblastoma are resistance of the chemo-radiotherapy, poor outcome and low survival time. The recommendations of WHO 2016 to diagnose the glioblastoma based on isocitrate dehydrogenase (IDH) gene mutations could not performed yet in our institutions. The objective of the research are to find the prevalence and outcome of glioblastoma-NOS based on histopathology findings and clinical manifestations.

Materials and Methods
We performed retro-analysis based on histology findings of all 48 patients with glioblastoma (WHO grade IV) during 2012 and 2017 period. We analyze demography data, chief complain, location of the mass, macroscopic finding, therapy and final outcome.

Results
Our findings show that the mean age of patient 49.29±12.31 years (range 17-72 years), male to female ratio is 1.1:1, dominant location of the tumor was in frontal lobe (25%) and chronic progressive headache as the chief complaint (90%). About 93.8% of the patients underwent tumor removal, and all patient received chemo-radiotherapy after surgery based on histopathology findings. The intraoperative finding are infiltrative into brain parenchyma dominantly. The survival time was 19.3±9.3 months. We count the prevalence of Glioblastoma-NOS in our tertiary referrer hospital about 30.5%.

Conclusion
The results show the characteristic was same as the glioblastoma IDH -mutant. We still have to prove the domination of glioblastoma based on biomolecular parameter of IDH1 mutant or IDH1 wildtype. This is important to standardize the incidence report, therapeutic consideration and prognostic prediction in our center.