

Pengaruh Mutasi Gen Isositrat Dehidrogenase (IDH) terhadap Derajat Glioma

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ABSTRAK

Pasien glioma mempunyai angka harapan hidup rendah yang sering mengalami kekambuhan dan resisten terhadap terapi. Terapi glioma hingga saat ini masih berdasarkan derajat keganasan glioma. Adanya mutasi gen isositrat dehidrogenase (IDH) pada glioma berkaitan dengan derajat glioma. Teknik biomolekuler dapat mengidentifikasi adanya mutasi gen IDH. Hingga saat ini belum ada penelitian tentang mutasi IDH pada glioma di Indonesia.

Penelitian ini bertujuan untuk mengetahui pengaruh mutasi IDH terhadap derajat glioma. Penelitian ini mendata 53 riwayat pasien di rekam medis untuk mendapatkan data tentang demografis pasien dan data klinis pasien. Penelitian ini menggunakan rancangan penelitian potong lintang (*cross sectional*). Tidak akan ada follow up dan intervensi yang akan dilakukan terhadap pasien. Sebanyak 53 sampel jaringan FFPE diuji dilaboratorium patologi anatomi untuk menentukan derajat keganasan glioma. Selain itu sampel juga dikirim ke laboratorium biomolekuler untuk mengetahui adanya mutasi IDH atau tidak.

Hasil analisis bivariat mutasi gen IDH1 dengan derajat glioma tidak didapatkan perbedaan yang signifikan dengan nilai $p > 0,05$. Walaupun secara statistik tidak didapatkan hubungan bermakna antara mutasi gen IDH1 dengan terhadap derajat glioma, namun hasil dari penelitian ini didapatkan kecenderungan mutasi gen IDH1 terjadi pada derajat II, III dan IV.

Kata kunci : mutasi gen isositrat dehidrogenase (IDH), derajat glioma

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The Effect Of Isocitrate Dehydrogenase Gen Mutation (IDH) In Grading Glioma

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ABSTRACT

Glioma patients have low survival rates that are often recurrent and resistant to therapy. Glioma therapy is still based on the degree of glioma malignancy. The presence of gene mutation of isositrate dehydrogenase (IDH) in glioma is related to degree of glioma. Biomolecular technic can identify the presence of IDH gene mutations. Until now there has been no research on the mutation of IDH in glioma in Indonesia. This study aims to determine the relationship between educational and leaflets to decrease the frequency of seizure in children epilepsy at the General Hospital Center Dr. Sardjito Yogyakarta

This study aims to determine the effect of IDH mutations on the degree of glioma. The study recorded 53 patient histories in the medical record to obtain data on patient demographics and patient clinical data. This study used cross sectional study design. There will be no follow up and intervention to be performed on the patient. A total of 53 FFPE tissue samples were tested in anatomical pathology laboratory to determine the degree of glioma malignancy. In addition samples are also sent to biomolecular laboratories to determine whether or not IDH mutations

Result of bivariate analysis of mutation of IDH gene with degree of glioma no significant difference with $p > 0,05$. Although there was no statistically significant association between IDH gene mutation to glioma degree, but the result of this study found the tendency of mutations of IDH1 gene occurred in degrees II, III and IV.

Keywords: Isocitrate Dehydrogenase Gen Mutation (IDH) , Grading Glioma

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