Seizures are common in low-grade gliomas (LGGs) and are highly correlated with the presence of the isocitrate-dehydrogenase 1 mutation (IDH1m). We aimed to explore the correlation between the IDH1m in LGGs and the presence of epilepsy as initial symptom. METHODS: Observational retrospective study on 164 patients with LGGs (86 oligodendrogliomas, 41 astro-oligodendrogial tumors and 37 astrocytomas) of whom 71% had seizures as initial symptom, analyzed according to Fisher's exact and Mann Whitney test. RESULTS. There was no difference in age or brain tumor location in patient with or without seizures. Seizures were more frequent in the group of IDH1m (92/117; 78%) vs. (27/47; 57.4%), p = 0.01. Fronto-insular location was more frequent in the group of IDH1m (75/117; 65%) vs (13/47; 27%), p = 0.01. There was no difference if analyzed by histological type of low-grade gliomas, except for oligodendroglialomas, in which seizures were more frequent with IDH1m 52/65 (80,0%) p = 0.02. The average age of the IDH1m with seizures was not significantly higher: 41.5 yrs vs. 39.5 yrs without seizures, p = 0.27. The type of seizures simple/complex partial (64/117; 55%) vs. generalized (53/117; 45%) is similar regardless of the presence of IDH1m, p = 0.8 CONCLUSION. Epilepsy as initial symptom in oligodendroglialomas is associated with the presence of IDH1 mutation. Fronto-insular location is more frequent among IDH1 mutated LGGs. There is no difference in type of seizures among IDH1 mutated LGGs.