Gohar et al. studied the relation between allergic conditions and serum level of IgE and glioma risk. They also examined the role of SNP of inflammatory genes IL-4 R α (rs 1801275) and IL-13 (rs 1800925) in development of glioma and to find out factors which can modify the prognosis of glioblastoma. This study included 98 Egyptian glioma cases and 98 healthy controls. Full history and clinical data were taken; total serum IgE were assayed, genotyping of IL-4 R α (rs 1801275) and IL-13 (rs 1800925) genes was carried out by restriction digestion after genes amplification. In cases group histopathological examination and tumor grading were done. Past history of allergic condition and elevated serum levels of IgE were more frequent in controls than in cases group (P< 0.05). Genotypes AA and AG of IL- 4R α were significantly frequent in cases and A allele were considered risk factor for glioma OR 2.31(1.53- 3.48), P < 0.001. We also found that C allele of IL-13 is risk factor for glioma susceptibility with p value = 0.006. Longer median survival period in glioblastoma were associated with elevated serum IgE level and who were AA genotypes of IL-4 R α. We conclude an inverse relation between glioma risk, and allergy biomarker IgE and allergy related (IL-4R α; rs 1801275) gene polymorphisms. GBM patients with IL-4Rα AA genotype, have longest survival. Chemotherapy and gross total resection improve GBM prognosis [1)].

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Gohar MK, Ammar MG, Alnagar AA, Abd-ElAziz HA. Serum IgE and Allergy Related Genotypes of IL-4R α and IL-13 Genes: Association with Glioma Susceptibility and Glioblastoma Prognosis. Egypt J Immunol. 2018 Jan;25(1):19-33. PubMed PMID: 30242995.