Hispanic

Latino Americans are a rapidly growing ethnic group in the United States.

The objective of a study was to investigate the effect of epilepsy surgery on depression, anxiety, and quality of life (QOL) in a Hispanic, primarily immigrant, Spanish-speaking population with intractable epilepsy (IE).

Patients with IE from a comprehensive epilepsy treatment center in an urban, public healthcare setting who underwent resective brain surgery between 2008 and 2014 (N=47) and completed presurgical and postsurgical neuropsychological evaluation were retrospectively identified. Presurgical and 1-year postsurgical Beck Depression Inventory-II (BDI-II), Beck Anxiety Inventory (BAI), and QOLIE-31 ratings were analyzed as postsurgical outcome measures. One-tailed paired sample t-tests were used to evaluate whether scores improved postoperatively. Established severity level classifications of depression and anxiety (i.e., minimal, mild, moderate, or severe) were used to analyze changes in occurrence of depression and anxiety.

Medium to large improvements on the BDI-II and most QOLIE-31 subscales, with a smaller effect on the BAI and remaining QOLIE-31 subscales, were noted 1-year postsurgery. Levels of depression and anxiety were significantly reduced 1-year postsurgery. Depression, anxiety, and QOL improvements were robust and unaffected by gender, levels of education, or hemisphere of surgery.

This study supports the positive benefits of epilepsy surgery on depression, anxiety, and QOL in Hispanic, primarily undocumented immigrant, Spanish-speaking people with epilepsy (PWE) in the US. These results are useful for educating this particular population about the possible benefits of surgery for IE and can enhance presurgical counseling [1)].

Studies of glioblastoma

Studies of glioblastoma in this population are limited.

Shabihkhani et al., have evaluated characteristics of 21,184 glioblastoma patients from the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute. This SEER data from 2001 to 2011 draws from 28% of the U.S.

Latinos have a lower incidence of GBM and present slightly younger than non-Latino Whites. Cubans present at an older age than other Latino sub-populations. Latinos have a higher incidence of giant cell glioblastoma than non-Latino Whites while the incidence of gliosarcoma is similar. Despite lower rates of radiation therapy and greater rates of sub-total resection than non-Latino Whites, Latinos have better 1 and 5 year survival rates. SEER does not record chemotherapy data. Survivals of Latino sub-populations are similar with each other. Age, extent of resection, and the use of radiation therapy are associated with improved survival but none of these variables are sufficient in a multivariate analysis to explain the improved survival of Latinos relative to non-Latino Whites. As molecular data is not available in SEER records, we studied the MGMT and IDH status of 571 patients from a UCLA database. MGMT methylation and IDH1 mutation rates are not statistically significantly different between non-Latino Whites and Latinos. For UCLA patients with available information, chemotherapy and radiation rates are similar for non-Latino White and Latino patients, but the latter have lower rates of gross total resection and present at a younger age [2)].

1)
Smith JAD, Armacost M, Ensign E, Shaw S, Jimenez N, Millett D, Liu C, Heck CN. Epilepsy surgery in the underserved Hispanic population improves depression, anxiety, and quality of life. Epilepsy Behav. 2018 Apr 6;83:1-6. doi: 10.1016/j.yebeh.2018.03.015. [Epub ahead of print] PubMed PMID: 29631155.
2)
Shabihkhani M, Telesca D, Movassaghi M, Naeini YB, Naeini KM, Hojat SA, Gupta D, Lucey GM, Ontiveros M, Wang MW, Hanna LS, Sanchez DE, Mareninov S, Khanlou N, Vinters HV, Bergsneider M, Nghiemphu PL, Lai A, Liau LM, Cloughesy TF, Yong WH. Incidence, survival, pathology, and genetics of adult Latino Americans with glioblastoma. J Neurooncol. 2017 Feb 4. doi: 10.1007/s11060-017-2377-0. [Epub ahead of print] PubMed PMID: 28161760.