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Introduction

There are limited data outlining the effect of socioeconomic status (SES) on outcomes for pituitary tumors. This population-level study investigates the role of SES on receiving treatment and survival in patients with pituitary tumors.

Methods

This study included patients diagnosed with pituitary tumors between 2003 and 2012. Data were collected from the Surveillance, Epidemiology, and End Results (SEER) program database at the National Cancer Institute. 25,802 patients were included. SES was measured by a composite index developed by Yost et al. Race was categorized as Caucasian and non-Caucasian. Treatment received included surgery, radiation, and radiation with surgery. Odds of receiving surgery and survival probability were analyzed using multivariate logistic regression and Cox proportional hazards model, respectively.

Learning Objectives

Understand the methods of stratifying patients based on socioeconomic status for the purpose of administrative database studies

Describe the effect of socioeconomic status and race on the likelihood of receiving surgery for pituitary tumors

[Default Poster]

Results

High SES tertile [OR = 1.095; 95% CI [1.059, 1.132]) and quintile (OR = 1.052; 95% CI [1.031, 1.072]) were associated with higher odds of receiving surgery (p <0.0001). Caucasian patients had higher odds of receiving surgery when compared to non-Caucasian patients (OR = 1.064; 95% CI [1.000, 1.133]; p<0.05). Neither SES nor race was a significant predictor of survival probability (all p>0.05).

Conclusions

This study finds that socioeconomic status and race are independent predictors of patients receiving surgery for pituitary tumors. Further studies are required to investigate possible causes for these findings.