Sociodemographic Factors Associated with Advanced Vulvar Cancer Stage

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Background

Advanced stage vulvar cancer (stage III and IV) is associated with worse outcomes when compared to earlier stages. The highest chance of cure is found in early stage (I and II).

Patient embarrassment, physician delay in biopsy, monetary restrictions, and limited access to healthcare are a few of the commonly associated factors that can lead to a delay in diagnosis and thus, later staging. Identification of targetable risk factors associated with this delay can potentially be translated to a higher cure rate.

Objective

The objective of this study is to identify the U.S. sociodemographic factors associated with advanced stage in vulvar cancer patients.

Methods

The Surveillance, Epidemiology, and End Results (SEER) U.S. cancer registry was queried for cancer of the vulva from 2004-2012 including all stages, histologies, and treatments. A total of 9,902 patients were identified. Global demographics, treatment specifics, and survival outcomes were also obtained.

A multivariate logistical regression analysis was performed to identify variables associated with advanced stage (III and IV). The following variables were included: histology, marital status, year of diagnosis, race, U.S. geographic region, insurance status, age group, and median income.

Results

Ages above 60 (see table) and uninsured status (OR 1.397; p=0.049) was associated with higher likelihood of advanced stage. Diagnosis after 2010 (see table) was protective for advanced staged. Race, marital status, histology, median income, and U.S. geographic location were not significant for likelihood of advanced stage.

Conclusions

With an increasing aging population and an increase in vulvar cancer, identification of populations at risk is fundamental for better outcomes. Populations identified to be at risk were the uninsured and those aged over 60. Racial disparities were not identified. While we don’t have an absolute explanation for the protective factor of diagnosis after 2010, we can reason that there was a higher level of awareness and/or improved access to care. Implementing better access and improving awareness in the community, particular to the populations at risk, can lead to better outcomes.

References