We report the demographics and survival trends of the incidence of Merkel cell carcinoma (MCC) has increased over the past few decades.

Merkel cell polyomavirus infection.

Statewide cancer registries provide prevalence, trend, and determinant data to identify disparities in the burden and survival of MCC in the adult population.

We report the demographics and survival trends of MCC from 1981 to 2009 in the Florida adult (≥18 years) population to identify the disparities among certain ethnic, racial, gender, and mortality due to malignant MCC.

METHODS

The Florida Cancer Data System (1981-2009) was linked with US census to explore median survival and 1-, 3-, 5-year survival rates by sociodemographics.

Survival time is the primary clinical endpoint, which is calculated as the elapsed time from date of MCC diagnosis to date of death or the date of last contact if patient is still alive.

Survival was compared by gender, race, ethnicity, SES. A multivariable Cox regression model for overall survival is fitted to calculate adjusted hazard ratios (HR) and 95% confidence intervals (95%CI).

RESULTS

From 1981 to 2009, there were 1,951 diagnosed cases of MCC with 66.8% of those diagnosed in males. (Table 1)

60.1% of those diagnosed with MCC were on Medicare, and 95.9% of those diagnosed lived in an urban setting.

The five-year survival rate was 20.5% overall with a median survival time of 2.1 years from diagnosis.

Black race showed better survival than White race with median survival time from diagnosis of 4.6 years (95% CI: 0.2, 10.3) and a hazard ratio of 0.81 (0.4, 1.63). (Figure 1a)

Hispanic ethnicity demonstrated worse survival than non-Hispanic ethnicity with a hazard ratio of 1.23 (0.83, 1.83).

Females diagnosed with MCC had a median survival time from diagnosis of 2.5 years (2.1 – 2.9) and a hazard ratio of 0.9 (0.8, 1.02) when compared to males diagnosed with MCC. (Figure 1c)

The highest income category of neighborhood status had longest median survival of 2.4 years from diagnosis compared to all other categories of neighborhood status. (Figure 1b)

CONCLUSION

Using the statewide Florida cancer registry, it is evident that there are clear disparities across genders, ethnicities, races, and neighborhood income levels in Merkel cell carcinoma survival in the Florida adult population.

By identifying which groups carry the largest burden of Merkel cell carcinoma, we can establish group-specific screening efforts.

In addition, the survival disparities demonstrate which groups carry the greatest mortality burden due to Merkel cell carcinoma.