Clinical features and outcomes of high grade serous ovarian cancer (HGSOC) in Asian Indians and Pakistani Americans (AIPA)

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Keywords: ovarian cancer, health disparities, oncology

BACKGROUND

Ovarian cancer is one of the most fatal female reproductive cancers. South Asians are one of the fastest growing ethnic groups in the United States, and most of the published literature have failed to stratify Asian ethnic groups to diverse types. We aim to determine the clinical features and outcomes of HGSOC in this group.

METHODS

Disease characteristics, treatment modalities and survival data were obtained for AIPA and Non-Hispanic Whites (NHW) aged 18 years and more from 2000 to 2018 from the SEER database. Baseline characteristics were compared across these groups. Univariate survival analysis was done using Kaplan Meier plot with log rank test, and Cox proportional hazard regression model was used for multivariate survival analysis.

RESULTS

A total of 28,289 population were included, among which 27,949 were NHW and 340 were AIPAs. Among AIPAs, 214 (63%) were Asian Indians, 118 (35%) were Indian/Pakistanis not specified and 8 (2%) were Pakistanis. AIPA were significantly younger at diagnosis compared to NHW (median age at diagnosis: 56 year to 64 years, p = 0.00). Both AIPAs and NHW were likely to be diagnosed with regional or distant disease (p = 0.4), however, AIPAs were more likely to receive chemotherapy compared to NHW (88% to 80%, p = 0.001). AIPAs were found to have better survival than NHW in univariate (p=0.0001) analysis and after adjusting for age and other co-variates in multivariate analysis (HR = 0.65, CI: 0.70 - 0.97, p = 0.01).

CONCLUSION

AIPAs tend to have a better survival and younger age at diagnosis in comparison to NHW. Further studies are warranted to evaluate unique features of HGSOC in AIPAs.