Demographics, Histopathology, and Treatment Outcomes of Squamous Cell Carcinoma of the Prostate

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Abstract

Background: Squamous cell carcinoma of the prostate (SCCP) is a neoplasm that comprises fewer than 1% of all primary prostate cancer diagnoses. Given its rarity, there is a paucity of data regarding the treatment of this disease. The limited literature points to the potential of local therapy in conjunction with chemotherapy to improve patient mortality. Methods: Using the National Cancer Initiative’s Surveillance, Epidemiology, and End Results (SEER) database, we conducted a retrospective analysis for patients diagnosed with primary SCCP between 2000 and 2018. We analyzed patient demographics, tumor characteristics, such as histology, and patient outcomes based on treatment modality. We generated Kaplan-Meier five-year overall survival (5y OS) curves for these variables. Results: A total of 66 patients were identified. Five-year overall survival was 18%; median overall survival was 13 months. Patients with Grade II and below disease had an increased 5y OS of 48%, compared to 10% for patients with Grade III and Grade IV disease (p < 0.05). Analysis of the 5y OS based on disease histology revealed patients with papillary SCC had a 5y OS of 50%, compared to 26% for patients with papillary carcinoma, not otherwise specified. Analysis of 5y OS stratified by treatment modality revealed no statistically significant change with any treatment (surgery, radiotherapy, and chemotherapy). Conclusions: The literature on SCCP remains sparse; the rarity of this disease limits analysis. While the investigation undertaken in this paper does not find any change in 5y OS regardless of treatment modality, the variation in 5y OS based on histologic classification of SCCP points to a potential route for the future treatment of this disease.

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Overall Survival (OS) of patients diagnosed with Squamous Cell Carcinoma of the Prostate (SCCP) between 2000 and 2018, stratified by disease Grade (n = 66)
Overall Survival (OS) of patients diagnosed with Squamous Cell Carcinoma of the Prostate (SCCP) between 2000 and 2018, stratified by disease histology (n = 66)

- 0520: Papillary carcinoma, NOS
- 0522: Papillary squamous cell carcinoma
- 0670: Squamous cell carcinoma, NOS
- 0713: Squamous cell carcinoma, keratinizing, NOS
- 0702: Lymphoepithelial carcinoma

Overall Survival (OS) of patients diagnosed with Squamous Cell Carcinoma of the Prostate (SCCP) between 2000 and 2018, stratified by treatment modality (n = 66)

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Table_1_mcl11092023.docx available at https://authorea.com/users/500099/articles/732463-demographics-histopathology-and-treatment-outcomes-of-squamous-cell-carcinoma-of-the-prostate