This study shows that the clinical and pathologic variables examined are not able to predict recurrence, overall survival, or survival after recurrence in SpSCC. These tumors are not uniformly aggressive and have different behavior depending on the location of the tumor as well as on the specific pathologic and clinical features. The presence of an exophytic tumor did not predict disease recurrence, disease specific survival or overall survival.

CONCLUSIONS

Patients with SpSCC are at high risk of developing locoregional recurrence compared to conventional SCC, but no measured clinical or pathologic parameter was predictive of survival. While overall survival is similar to conventional SCC, close follow-up should be considered in these patients to allow for earlier detection and treatment of these locally aggressive tumors. Our data indicate that laryngeal and oropharyngeal SpSCC may respond better to primary surgical therapy rather than chemoradiation.

REFERENCES


Figure 1. Overall Survival (a) and Time to Recurrence (b) Stratified by Tumor Site

Figure 2. Overall Survival Stratified by Tumor Stage (a), Smoking Status (b) and the Presence of an Ectopytous Tumor (c)

Figure 3. Overall Survival (a) and Time to Recurrence (b) Stratified by Treatment Type (Surgery vs Radiation + Chemotherapy) within the Oral Pharynx

Figure 4. Overall Survival (a) and Time to Recurrence (b) Stratified by Treatment Type (Surgery vs Radiation + Chemotherapy) within the Larynx

INTRODUCTION

Pathologic Correlation

All cases were reviewed by two of the pathologists. The diagnosis of SpSCC was made when a malignant spindle cell neoplasm was identified arising from a mucosal epithelial surface. Many cases had invasive or in-situ carcinoma associated with them but these were not recognized as separate entities in the original clinical cases. Routine immunohistochemical staining was not used.

Analysis

Variants of interest were age, gender, tumor subtype, T stage, N stage, M stage, smoking status (never, ever, ever ≥ 5 years ago, > 5 years ago), current treatment modality (surgery, radiation, or surgery and radiation), margin status, the presence of an exophytic tumor (as defined by the tumor exceeding normal tissue margins), and tumor subsite. The outcomes of interest were time to recurrence (TR) and overall survival (OS). TR and OS were defined as the time from the date of diagnosis to the date of disease recurrence.

RESULTS

There were no statistically significant differences in survival when comparing stages I and II, or stages III and IV, respectively. Figure 2a, smoking status (2 year, 5 year, 10 year, and 15 year survival; Figure 2b) or presence of an ectopytous tumor (2 year: 91% vs 89%, 5 year: 80% vs 79%, respectively). Figure 2c, there was no difference in time to recurrence or overall survival for any clinical or pathologic variables in the study.

DISCUSSION

This study shows that the clinical and pathologic variables examined are not able to predict recurrence, overall survival, or survival after recurrence locally. Overall survival is similar to conventional SCC. Subsites of this disease include the larynx, pharynx, oral and nasal cavity (in descending order), and case reports of tumors in the maxillary sinuses and trachea have been reported. 1,14,15 Overall survival for tumors in the head and neck is usually better after primary surgery than after radiation therapy. Overall survival and disease specific survival for patients with SpSCC treated with radiation are >80%.

Figure 4b. Interestingly, three of the six treatment failure were able to be salvaged with surgery.

Figure 4a. Within the group of 15 patients with a laryngeal primary tumor, 10 patients were treated with radiation with or without chemotherapy and 5 patients treated with surgery. There were no differences in survival between patients treated with chemoradiation versus surgery (Figure 4a). There were 3 patients treated with surgery and 4 patients with chemoradiation. Among the four patients who developed a recurrence and were salvaged with surgery, there was no significant difference in the development of a second local or regional recurrence.

Figure 4c. There were 3 patients treated with surgery and 4 patients treated with chemoradiation. Among the four patients who developed a recurrence and were salvaged with surgery, there was no significant difference in the development of a second local or regional recurrence.

Figure 4d. Interestingly, three of the six treatment failure were able to be salvaged with surgery.

Figure 4e. Within the group of 15 patients with a laryngeal primary tumor, 10 patients were treated with radiation with or without chemotherapy and 5 patients treated with surgery. There were no differences in survival between patients treated with chemoradiation versus surgery (Figure 4a). There were 3 patients treated with surgery and 4 patients with chemoradiation. Among the four patients who developed a recurrence and were salvaged with surgery, there was no significant difference in the development of a second local or regional recurrence.

Figure 4f. Interestingly, three of the six treatment failure were able to be salvaged with surgery.