INTRODUCTION

Metatypical carcinoma is a cutaneous malignancy with characteristics from both basal cell and squamous cell carcinomas. It is also known as basosquamous carcinoma and is considered an aggressive subtype of basal cell carcinoma. Retrospective studies suggest that this neoplasm accounts for 1.2-2.7% of all basal cell carcinomas. The majority occurs in the head and neck, especially on the nose and the central area of the face. Metastasis is a rare event, although more frequent in the metatypical subtype than in the others.

There is no specific clinical feature that differentiates the metatypical subtype from other basal cell carcinomas. Diagnosis is often made after surgical pathology examination. Histology shows cells without perifollicular palisades and with intermediate differentiation between basal and squamous cells. Mytotic index and number of atypical mitosis are also higher in metatypical than other subtypes. In fact, size of the lesion that metatypical carcinoma must be considered as a distinct type of skin cancer.

There are few studies about the incidence and aggressive features of metatypical carcinomas, especially in Latin America. Recently, our group reported a series of 642 basal and neck basal cell carcinomas, comparing cases submitted to surgery by the Dermatology and the Head and Neck Surgery Departments. Metatypical carcinomas were found in 9.9% of the Head and Neck Surgery cases and in 4.8% of the Dermatology patients. Here, we present a series of metatypical carcinomas submitted to major surgical resections by the Head and Neck Surgery Department and identify unique characteristics comparing these tumors to the to other subtypes of basal cell carcinoma.

METHODS AND MATERIALS

We reviewed all charts from cases submitted to major resections in our institution from January 1994 to January 2012. In all cases, surgery was performed under general anesthesia, the tumor was excised with appropriate margins and confirmed by intraoperative frozen section. Cases were considered as metatypical if it was the sole component of the lesion or in combination with other subtypes (mixed cases).

Data regarding gender, age, tumor location, risk-assessment zone, tumor size, histological subtype and angiolymphatic and/or perineural invasion were reviewed. Tumor location was defined by the position of the center of the lesion, according to nine subsites: scalp, frontal, periorbital, nose, malar, nasolabial fold, cervical, ear and lip. We classified the risk-assessment areas using NCCN recommendations for skin neoplasms, which includes high (H) and moderate (M) risk for head and neck locations. The size of the lesion was obtained according to the largest measurement obtained by gross analysis of the specimen. The following histologic subtypes were found: nodular, superficial, micronodular, metatypical, sclerosing, morpheaform, adenoïd, cystic, ulcerated, multicentric and pigmented.

Statistical analysis was performed using Minitab 16 for Windows (Minitab Inc, State College, PA). Qualitative variables were analyzed using chi-square and Fisher test and Student’s t test was the method of choice for quantitative data. Statistical significance was set to p<0.05.

RESULTS

A total of 363 charts of patients with basal cell carcinoma submitted to major resections were retrospectively collected from the files. Thirty-seven cases (10.1%) were classified as metatypical, either as the main (44%) or associated subtype (56%).

- **Gender:** According to gender, men were more frequently affected by both metatypical (62.1%) and other basal cell carcinoma subtypes (51.2%), with no significant statistical difference (p=0.2).
- **Age:** There was no significant difference in age between the two groups. Average age was 64.2±12.8 years for the metatypical subgroup and 65.1±14.2 years for other basal cell carcinomas (p=0.68).
- **Size:** Metatypical basal cell carcinomas were statistically bigger than the other subtypes. Average size was 4.1cm for metatypical and 2.6cm for other basal cell carcinomas (p<0.001).
- **Risk zones and locations:** The majority of the tumors in both groups were in the high risk area (H). This proportion, however, was lower in the metatypical group when compared to the other basal cell carcinomas (75.6% and 89.7%, respectively; p=0.002). There was a higher proportion of tumors located in the scalp and cervical region and a lower frequency of nasal tumors in the metatypical group.
- **Perineural invasion:** The rate of perineural invasion was statistically higher in metatypical carcinomas, being positive in 47.2% of the tumors, against 20.8% in other basal cell carcinomas (p<0.001).
- **Angiolymphatic invasion:** It was present in only 4 cases, out of the metatypical, with no statistical difference between subtypes (p=0.34).

CONCLUSIONS

Our results on aggressive and mutilating head and neck metatypical carcinomas showed this tumor to be significantly larger and with a higher frequency of perineural invasion than other subtypes of basal cell carcinomas. On the other hand, we also found them to be less frequently found in high risk areas, especially the nose. Although this subtype shares many features with other aggressive skin carcinomas, our findings suggest unique characteristics and perhaps a different etiology, what corroborates to the current trend that it should be considered a distinct type of skin neoplasm.

REFERENCES