ABSTRACT

Objectives:
1. To review traditional techniques for the management of conjunctival melanoma
2. To assess the need for parotidectomy and neck dissection in the management of conjunctival melanoma

Methods:
Retrospective review conducted in a tertiary academic medical center of patients diagnosed with conjunctival melanoma over a 20-year period

Results:
39 patients diagnosed with conjunctival melanoma were identified from January 1990 to December 2010. Follow-up varied from 2 to 201 months (median, 25 months). 16 (41%) had local recurrences at the primary site, two (13%) of which later presented with parotid disease. One patient with parotid recurrence had a subsequent neck dissection for confirmed metastatic spread. No patient in this series had metastatic cervical disease without initial spread to the parotid. The probability of disease free survival at 1, 2, and 5 years was 77, 68, and 50%, respectively. The probability of parotid free progression at 1, 2, and 5 years was 100, 96, and 90%, respectively.

Conclusion:
Conjunctival melanoma is a rare malignancy traditionally managed with aggressive local control. The role for staging parotidectomy with or without neck dissection has been heavily debated. Based on our review, parotidectomy only needs to be undertaken when high suspicion for metastatic spread is present, such as a palpable or radiographically evident mass. In addition, without documented parotid disease, neck dissection is not required.

INTRODUCTION

Conjunctival malignant melanomas (CMM) are rare and account for only 2% of all ocular malignancies. Current management includes wide local excision with adjuvant therapy including brachytherapy, cryotherapy, or application of topical chemotherapy to resection margins.

Unlike cutaneous melanomas of the head and neck or extremities, the pattern of lymph node spread of CMM and its effect on prognosis is unclear. In turn, this makes it uncertain whether treatment of regional lymph nodes (parotid gland and neck nodes) is important. In order to further clarify this issue, we reviewed our experience of CMM treated at a tertiary medical center over a 20-year period to determine the role of staging parotidectomy and neck dissection in the management of these cases.

MATERIAL AND METHODS

All surgical cases of conjunctival melanoma, diagnosed by an ophthalmic pathologist, at UCLA Medical Center from January 1990 to December 2010 were identified via an electronic search of the pathology database. As well described, pathologic criteria for the diagnosis of CMM requires identification of atypical melanocytes (pleomorphic nuclei, prominent nucleoli, increased nuclear to cytoplasmic ratio, atypical mitoses, and loss of maturation) with invasion of the underlying substantia propria of the conjunctiva.

Forty-five patients with CMM were identified over a 20-year period. A retrospective chart review was then conducted to determine history, tumor location, treatment, treatment outcomes, and follow-up among this cohort.

RESULTS

There were 18 (46%) men and 21 (54%) women. Follow-up varied from 2 to 201 months (median, 25 months). Primary surgical treatment was performed in all patients. Two (5%) patients had an orbital exenteration for initial management while the remaining 37 (95%) all had wide local excisions with adjuvant cryotherapy. In time, sixteen (41%) patients had local melanoma recurrences at the primary site.

Only 2 of the 7 patients (13%) with local recurrences after initial wide local excisions later developed positive regional metastatic disease within the parotid gland. One patient with parotid recurrence developed metastatic cervical disease requiring a neck dissection. Positive neck disease was only seen when positive parotid disease occurred.

CONCLUSIONS

Conjunctival melanoma is a rare malignancy traditionally managed with aggressive local control. Staging parotidectomy with or without neck dissection has been heavily debated. Based on our data, elective parotidectomy and neck dissection do not need to be performed unless in the presence of obvious clinical or radiographic presence of disease. In addition, if there is no evidence of metastatic spread to the parotid gland, neck dissection is not required.