



CONJUNCTIVAL TUMORS

Chemoreduction with topical mitomycin C prior to resection of extensive squamous cell carcinoma of the conjunctiva

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No abstract

Conjunctival melanoma in the Netherlands: a nationwide study

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PURPOSE: To evaluate risk factors for local recurrence, regional and distant metastases, and mortality associated with conjunctival melanoma.

METHODS: This was a retrospective study of 194 patients with histologically confirmed conjunctival melanoma diagnosed between 1950 and 2002 in the Netherlands. Data were collected from all university centers and many nontertiary hospitals, using the National Pathology and the Leiden Oncologic Registration Systems. Based on the number of incidences, this study included 70% of the conjunctival melanomas in The Netherlands. Clinical and histopathological data for conjunctival tumors were reviewed and compared with data reported in the literature. Risk factors for local, regional, and distant metastases and survival were analyzed using the Kaplan-Meier and Cox regression analyses.

RESULTS: Of 194 patients with conjunctival melanoma, 112 had a local recurrence (median, 1; range, 1-9) during follow-up (median, 6.8 years; range, 0.1-51.5). Location was the most important risk factor for development of local recurrence, and significantly more occurred with nonepibulbar (log rank, $P=0.044$) tumors. Significantly fewer local recurrences occurred with tumors initially treated with excision and adjuvant brachytherapy rather than with excision only (log rank, $P=0.008$) or with excision and cryotherapy (log rank, $P < 0.038$). Forty-one (21%) patients had regional lymph node metastases, mostly to the parotid or preauricular lymph nodes ($n=26$; 13%). Risk factors for regional metastases were tumor thickness (log rank, $P < 0.001$) and tumor diameter (log rank, $P=0.010$). Forty-nine (25%) patients (mean, 4.37 years) had development of distant metastases, mainly in the lung, liver, skin, and brain. Tumor-related survival was 86.3% (95% confidence interval [CI], 81.0-91.6) at 5 years, 72% (95% CI, 79.7-64.4) at 10 years, and 67% (95% CI, 58.9-76.1) at 15 years. The main mortality risk factors were nonepibulbar location (log rank, $P < 0.0001$) and tumor thickness (log rank, $P=0.0004$).

CONCLUSIONS: Nonepibulbar tumors more often recur locally and are associated with a shorter survival

independent of other risk factors. Tumor thickness is also an important predictor of regional and distant metastases, as well as survival. A prospective study is needed to compare the effect of excision with radiotherapy and excision with cryotherapy on the number of local recurrences, exenteration rate, and survival.

Liquid nitrogen cryotherapy of a conjunctival vascular tumor

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PURPOSE: To report the successful use of liquid nitrogen cryotherapy in treating a conjunctival vascular tumor.

METHODS: A Brymil unit with a "D" tip was used to apply a liquid nitrogen spray for cryotherapy, using a previously described double freeze-thaw technique.

RESULTS: One year after treatment, the suspected hemangioma was markedly decreased in size and redness.

CONCLUSION: Liquid nitrogen cryotherapy should be considered as an alternative to more frequently used methods of treatment of conjunctival vascular tumors.

Spontaneous regression of a large-cell lymphoma in the conjunctiva and orbit

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Ophthal Plast Reconstr Surg. 2004 Nov;20(6):461-3.

Spontaneous and complete regression of malignant neoplasms is extremely unusual. To our knowledge, this case report is the first description of spontaneous regression of an extranodal malignant lymphoma occurring in the conjunctiva and orbit. A 40-year-old woman noticed a pink conjunctival mass at the medial aspect of her left eye that had been present for 3 weeks. She presented on May 5, 2003.

Ophthalmologic examination showed a salmon-colored mass along the lateral side of the caruncle. CT revealed a mass in the medial orbit. Surgical biopsy exhibited a malignant lymphoma, diffuse large B-cell type. After biopsy, the tumor spontaneously decreased in size and completely disappeared in 5 weeks.

At 6 months' follow-up, the tumor had not recurred.

Ki-67 labeling index as a marker of malignancy in ocular surface neoplasms

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PURPOSE: To evaluate the relationships among histopathological type, clinical malignant grade, and Ki-67 labeling index (LI) in sebaceous gland carcinoma (SGC), conjunctival squamous cell carcinoma (SCC), and conjunctival intraepithelial neoplasia (CIN), with pterygium and normal conjunctiva as controls.

METHODS: This retrospective study was conducted at the Department of Ophthalmology, Kyoto Prefectural University of Medicine, Kyoto, Japan. We used tissue specimens obtained from 20 patients

(four SGC, four SCC, four CIN, four pterygium, and four normal conjunctiva). Ki-67 immunohistochemical analysis was performed in all 20 cases.

RESULTS: The Ki-67 labeling index (LI) was 46.1 +/- 3.0% (average +/- SD) in SGC, 28.4 +/- 4.5% in SCC, 20.0 +/- 7.2% in CIN, 9.0 +/- 2.2% in pterygium, and 6.8 +/- 2.3% in normal conjunctiva. Ki-67 LI was significantly (Mann-Whitney U test, $P < 0.05$) higher in SGC than in SCC, and higher, but not significantly, in SCC than in CIN. Ki-67 LI was significantly ($P < 0.05$) higher in SCC and CIN than in pterygium.

CONCLUSIONS: These results suggest that Ki-67 LI may be a sensitive marker for ocular malignant tumor grading.

Rituximab in primary conjunctiva lymphoma

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Our experience with a patient with a primary conjunctiva lymphoma who was treated with conventional dose of rituximab obtaining a complete response without acute and late local toxicity for the eye.

High frequency of human papillomavirus 6/11, 16, and 18 infections in precancerous lesions and squamous cell carcinoma of the conjunctiva in subtropical Tanzania

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Dysplastic lesions and epithelial neoplasms of the conjunctiva account for approximately 2% of all malignant tumors in subtropical Tanzania. We examined the pathophysiologic role of human papillomavirus (HPV) in the development of conjunctival carcinoma in subtropical Tanzania, which has a high HPV prevalence. Tissue samples from 14 patients were obtained from the cancer registry archives at the medical center of the university in Dar es Salaam, Tanzania. A highly sensitive nonradioactive in situ hybridization technique (ImmunoMax) was applied to paraffin-embedded tissue samples to identify HPV DNA in conjunctival epithelial dysplasia and epithelial neoplasms. In each case, conventional morphologic evaluation revealed a transitional lesion extending from koilocytic dysplasia to severe dysplasia or invasive squamous cell carcinoma. Highly specific, morphologically easily distinguishable labeling of HPV-6/11, HPV-16, and HPV-18 was found in most cases. Coinfections were observed frequently. The signals showed varying intensities and different patterns of distribution. In general, higher signal intensity was found in dysplasia grades 1 and 2 and in well-differentiated areas of the invasive component of conjunctival carcinoma compared with less differentiated areas. This observation underlines the central role of HPV-16 and HPV-18 in the oncogenesis of conjunctival cancers in subtropical Tanzania.

Epiphora as a side effect of topical mitomycin C

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AIM: To report symptoms and findings of lacrimal duct malfunction after topical mitomycin C (MMC) for conjunctival neoplasia.

METHODS: 14 consecutive patients treated with 1-6 cycles of topical 0.04% MMC four times daily for periods of 2 weeks were interviewed about symptoms of lacrimal duct malfunction. Patients who complained of tearing had examination of the puncta and canaliculi including probing and lacrimal duct irrigation.

RESULTS: Nine patients complained of epiphora after topical MMC. Three of these patients had normal puncta and canaliculi, patent to irrigation. In these patients epiphora ceased spontaneously after probing and irrigation. The additional six patients had stenosis of the punctum (n = 3), the common canaliculus (n = 1), both puncta and both canaliculi (n = 1) and complete occlusion of the lower canaliculus (n = 1).

CONCLUSION: Obstruction of the puncta or canaliculi is not an infrequent event after topical 0.04% MMC.

Systemic remission of non-Hodgkin's lymphoma after intralesional interferon alpha-2b to bilateral conjunctival lymphomas

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PURPOSE: To report the beneficial systemic effect of a 5-week course of intralesional interferon alpha-2b (IFN-A) injections to bilateral conjunctival lymphomas in a patient with relapsing non-Hodgkin's lymphoma.

DESIGN: Interventional case report.

METHODS: A patient in relapse with non-Hodgkin's lymphoma who declined further systemic therapy received 1.5-million IU IFN-A injected intralesionally to each of two conjunctival lymphomas to reduce ocular discomfort. This dose was repeated 10 times over 5 weeks.

RESULTS: Conjunctival, postauricular, and facial lesions clinically resolved within 3 months of the start of treatment. Inguinal lymph nodes reduced in size, and the patient reported increased well-being and less fatigue. Side effects included injection discomfort and mild flulike symptoms, which were well tolerated. The improvement lasted 6 months from the first IFN-A injection.

CONCLUSIONS: Intralesional treatment of conjunctival lymphomas with IFN-A induced disappearance of the tumors and also had a beneficial systemic effect.

Conjunctival metastasis as initial sign of disseminated cutaneous melanoma

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Ophthalmology. 2004 Oct;111(10):1933-4.

PURPOSE: To describe a patient with conjunctival metastasis as the initial manifestation of metastasis from a cutaneous melanoma. **DESIGN:** Single interventional case report.

METHODS: A 48-year-old woman with a history of cutaneous axillary melanoma developed a rapidly

growing conjunctival mass. Subsequent systemic evaluation disclosed asymptomatic liver metastasis. The conjunctival lesion was resected.

RESULTS: Histopathologic evaluation of the conjunctival tumor disclosed an epithelioid cell melanoma located in the conjunctival stroma, without appreciable junctional activity, compatible with metastatic melanoma.

CONCLUSIONS: Conjunctival metastasis from cutaneous melanoma can rarely be the initial manifestation of disseminated melanoma.

Adjunctive treatment with interferon alpha-2b may decrease the risk of papilloma-associated conjunctival intraepithelial neoplasm recurrence

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PURPOSE: To report a case of bilateral papilloma virus-positive conjunctival intraepithelial neoplasm and the treatment results of using adjunctive interferon alpha-2b.

METHODS: Case report and literature review.

RESULTS: A 73-year-old man underwent subtotal excisional biopsy of the 270-degree gelatinous limbal lesion of the right eye to avoid creating a limbal deficiency and cicatricial change. Total excisional biopsy of the temporal elevated leukoplakic limbal lesion was performed on his left eye. Histology examination showed bilateral intraepithelial neoplasia, and human papilloma virus-16 and -18 were detected by polymerase chain reaction in both lesions. Two supplemental perilesional injections of interferon alpha-2b in the right eye were given, and the residual mass decreased in size gradually and completed clinical resolution 7 weeks following initial surgery. Although no recurrence was noticed in the right eye, recurrence of the conjunctival intraepithelial neoplasm lesion was noticed in the left eye.

CONCLUSION: Adjunctive therapy might lower CIN recurrence rate, especially in extensive lesions, when surgical excision cannot ensure a tumor-free margin. Our bilateral case provided a good control example for the recurrence with or without adjunctive therapy.

Anti-CD20 monoclonal antibody therapy in relapsed MALT lymphoma of the conjunctiva

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Low-grade non-Hodgkin's lymphomas of the conjunctiva may be cured by radiotherapy, but complications are frequent and relapses may occur. Other treatment modalities including resection, cryotherapy, injection of interferon-alpha or systemic chemotherapy have been used with varying success. We treated two patients with relapsed extranodal marginal zone lymphoma (ENMZL) of mucosa-associated lymphoid tissue (MALT) of the conjunctiva with the anti-CD20 monoclonal antibody rituximab (375 mg/m² intravenously once weekly for 4 wk) which has previously been shown to be effective in a variety of other B-cell non-Hodgkin's lymphomas. Treatment was well tolerated and resulted in one partial and one complete remission. With a follow-up of 32 or 30 months, respectively, further recurrences have not been observed. Rituximab is a highly effective and well-tolerated treatment of conjunctival MALT lymphoma, which may not only be of value in relapse, but also in cases of contraindication to radiotherapy.