

MALIGNANT CONJUNCTIVAL NEOPLASMA OF THE SCLERA AND THE RESULTS OF THEIR TREATMENT.

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Introduction: epibulbar conjunctival tumors on average make up about 9% of all tumors of the eye. Men (58% - 88%) of middle age (46 ± 18) get sick more often. Malignant conjunctival tumors of the sclera are mainly epithelial (squamous cell carcinoma) and melanocytic (melanoma). Their untimely detection, inadequate treatment and malignant nature of the disease can lead to loss of eye functions, loss of eyeball and often to the death of the patient.

Purpose: to evaluate the results of cryodestruction (CD) and radiocryosurgery (RC) treatment of malignant epibulbar neoplasms in the ophthalmic oncology center of the State University "The Filatov Institute of Eye Diseases and Tissue Therapy of NAMS of Ukraine".

Material and methods: 94 (76.4%) patients with epibulbar melanoma (EM) were treated, among them 51 (50.5%) men aged 18 to 88 years (median 51.3), 50 (49.5%) women aged from 26 to 87 years (median 57.3) and 29 (23.6%) patients with epibulbar carcinoma (EC), among them men - 24 (77.4%) aged 28 to 82 (median 66.3), women - 7 (22.6%) aged 35 to 74 (median 57). Cryodestruction (CD) was performed on 6 (6.0%) patients with EM and 10 (34.5%) patients with EC. Radiocryosurgical (RC) treatment was performed in 88 (93.6%) patients with melanoma and 19 (65.5%) - with carcinoma.

CD was performed by the cryogenic device based on a balloon-throttle microcryogenic system that provides low temperatures in the range of -90 - 120 °C. Radiotherapy was performed by brachytherapy with a Sr-90 radiation source, total focal radiation dose (SVD) = (200 ± 34.0) Gy.

Results: after CD of melanoma complete resorption of the tumor occurred in 5 (62.5%) patients, partial - in 2 (25%). 1 patient (12.5%) had recurrence within the scar. After CD of carcinoma complete and partial tumor resorption occurred in 11 (91.7%) and 1 (8.3%) patients, respectively. Thus CD in treatment of melanoma is 1.5 times more effective than in treatment of carcinoma. These differences are significant ($\chi^2 = 5.9$, $p = 0.04$). There were no immediate complications after CD. According to remote observations, recurrences were observed in 2 cases of melanoma and 2 cases of

carcinoma, 25% and 16.7%, respectively. Thus, no significant differences between the histological types of the tumor were found for this fact. After RC treatment complete and partial resorption of the tumor, both in melanoma and in carcinoma, was observed in almost equal proportions, respectively in 73 (78.5%) and in 20 (21.5%) and in 14 (73.7%) and in 5 (36.3%) patients and no significant differences between the histological types of the tumor were found for this fact.

After RC treatment in the EM group, tumor recurrences were observed in 18 (19.4%) cases, and in EC – in 9 (42.2%), that is, in carcinoma, recurrences were observed 3 times more often and these differences were significant ($\chi^2 = 6.9$, $p = 0.03$). Late complications during RK treatment (scleromalacia) were observed only in melanoma in 6 (5.9%) patients within 6 months to 5 years (median 9 months). Of them, 5 (4.9%) patients successfully underwent scleroplasty, one patient underwent enucleation. 4 (3.9%) patients with EM underwent exenteration of the orbit due to tumor recurrence and its growth into the orbit. After RC treatment with EC, 4 (12.9%) patients underwent enucleation due to tumor recurrence, development of secondary uveitis with hypertension, and growth of neoplasm into the eyeball. In 1 (3.2%) case, tumor growth into the orbit was observed and exenteration of the orbit was performed.

Conclusions: CD treatment of epibulbar carcinoma is 1.5 times more effective than CD treatment of epibulbar melanoma. RC treatment is equally effective for EC and EM. Recurrences of EM and EC after CD occur equally often. Recurrences of EC after RC treatment are observed 3 times more often than EM.

Key words: epibulbar tumors, melanoma, carcinoma, cryo- and radiocryosurgical treatment.