

Modern Approaches to Oropharyngeal Cancer Therapy

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Abstract: New promising directions have emerged in the treatment of oropharyngeal tumors. The latter include the improvement of methods of chemotherapy, radiation therapy using new fractionation schemes, as well as successive modifications of the radiation volumes. Modern recommendations for the treatment of oropharyngeal cancer in patients with various stages of the disease are given.

Key words: chemotherapy, radiation therapy, locally distributed, cytostatics, radiosensitivity, metastases.

Introduction

Worldwide, approximately 275,000 cases of oral and oropharyngeal cancer occur annually. Malignant neoplasms of the head and neck occupy the 6th place in terms of prevalence worldwide and account for 1.8-2.2% of the total incidence of malignant tumors. From 2005 to 2014, global morbidity rates increased by 1% per year. In most countries, men have higher rates of oral cancer than women (caused by tobacco use). Poor oral hygiene, mechanical irritation, and Plummer-Vinson syndrome are considered as etiological factors that cause the development of malignant oropharyngeal epithelial tumors Plummer-Vinson.

Main part

In addition, the spread of the human papillomavirus (HPV) plays an important role. It has been shown that a 40-60% increase in the incidence of oropharyngeal cancer is associated with the use of mouthwash with a high alcohol content [3]. Опухоли Laryngeal and laryngopharyngeal tumors are the main localizations among the organs of the head and neck in terms of the frequency of damage. [2]. In the literature, we found the following data on the results of 5-year survival of 88 patients with amygdala and pharyngeal cancer, prognostic factors for oropharyngeal cancer: gender, hemoglobin concentration in the blood, the patient's status by gender Karnovsky, the prevalence of the tumor process [9]. F. Oreggia et al. [8] women had a better prognosis than men (40% and 9%, respectively). In some studies, there were no differences in survival for young and older patients (>40 years) [2]. At the same time, C. Johnson et al. [4] reported a reduction in 5-year overall survival of up to 14% in oropharyngeal cancer patients over 40 years of age.

About 60% of cases of oral/pharyngeal cancer are moderate (regional stage) or metastatic at the time of diagnosis [4].

The leading methods of treatment of oral and pharyngeal cancer to date are radiation therapy, surgical excision, chemotherapy, as well as combinations of these methods.

Methods of treatment of oropharyngeal cancer. About 80% of patients are admitted for treatment with a locally distributed process. The five-year survival rate of patients with oropharyngeal malignancies in stages III-IV remains low and ranges from 9% to 15% [5]. Currently, there is no single approach to choosing the best treatment methods for oropharyngeal cancer. Performing radical surgery in such patients is often impossible due to the prevalence of the tumor process at the time of primary diagnosis. A significant obstacle to performing operations is the anatomotopographic features of this area and the need for extensive excision of soft tissues, after which serious functional disorders and cosmetic defects remain. The main method of treating oropharyngeal cancer is radiation therapy, which is used independently and in combination with cytostatics.

Radiation therapy. Based on the understanding of the peculiarities of the response of normal and tumor tissues to various types of radiation exposures, methods are being developed and improved to increase the effectiveness of the antitumor effect of ionizing UV radiation. [7] Great prospects in this direction are associated with the use of advances in the management of radio sensitivity of the tumor and normal body tissues. The use of non-traditional methods of summing up the radiation dose seems to be one of the most promising methods of radio modification. Currently, four main UV modifications are used: short intensive

continuous courses, split fractionation mode, concomitant irradiation, and dose escalation mode (gradual increase in ROP) [8]. Chemoradiotherapy. Insufficient selectivity of the action of ionizing radiation in relation to the tumor tissue still makes it difficult to bring to the tumor the doses necessary for complete cure due to the excess tolerance of normal tissues. This is what dictates the expediency of using antitumor drugs in combination with RT. Medications affect not only the tumor and metastatically altered regional lymph nodes, but also systemically affect subclinical distant metastases. The meaning of the combination of cytotoxic agents and radiation is to increase the effectiveness of exposure to tumor tissue in comparison with chemotherapy (CT) or radiation used in its own version. The most active chemotherapeutic agents in the treatment of oropharyngeal cancer are bleomycin, cisplatin, carboplatin, methotrexate and vinblastine. The activity of individual drugs does not exceed 24-43%, so polychemotherapy is preferred in the treatment of oropharyngeal cancer polychemotherapy.. [10]

We analyzed the factors influencing the choice of treatment method. An important role in the choice of treatment method is played by the histological regional lymphatic nodes and their localization, the localization of the tumor in the pharynx and the form of its growth, the age of patients and their status by gender To Karnovsky.

Conclusion

Analysis of the presented material suggests that new promising areas have emerged in the treatment of oropharyngeal tumors. The latter include the improvement of RT techniques with the use of new fractionation schemes, as well as successive modifications of the irradiation volumes. A promising direction can be considered the appearance of new antitumor drugs that have shown their effectiveness in tumors of the considered localization. At the same time, success was noted in the development of integrated chemoradiotherapy approaches. The use of all the first modern approaches to the treatment of oropharyngeal cancer gives reason to hope for success in the treatment of this serious disease. Work in these areas continues.

References

1. Gorbunova V. A. New cytostatics in the treatment of malignant tumors, Moscow, 2001. 84. (Warnakulasuriya S. 2018, Vinogradov V. 2007)
2. Dvoirin V. V., Aksel E. M., Trapeznikov N. N. Morbidity and mortality from malignant neoplasms of the population of Russia and some other CIS countries in 2000-Moscow: ONC RAMS, 1999. - p. 6.
3. Perevodchikova N.I. Antitumor chemotherapy – Moscow, 1996 – C. 49–51. (American Cancer Society : Cancer Facts and Figures 2018. , Howlader N. , Noone A.M. , Krapcho M. 2015) Ang K.K.,
4. Peters U. Concomitant boost radiotherapy in the treatment of the head and neck cancer // Semin. Radiat. Oncol. – 2013. – №2. – P. 31.
5. Awwad H.K., Lotayef M., Shouman T. et al. Accelerated hyperfractionation (AHF) is superior to conventional fractionation (CF) in the postoperative irradiation of, locally advanced head & neck cancer (HNC): influence of proliferation // Radiother. oncol. – 2000. – Vol. 56 (suppl. 1). – Abstr. 39
6. Bernier J., Denekamp J., Rojas A. et al. ARCON. Accelerated radiotherapy with carbogen and nicotinamide in head and neck squamous cell carcinomas. The experience of the Cooperative Group of Radiotherapy of the European Organization for Research and Treatment of Cancer (EORTC) // Radiother. oncol. – 2000. – Vol. 55. – P. 111–119.
7. Calaris G., Reynaud R., Bougnoux A., Garand G. et al. Oropharynx carcinoma: irradiation alone versus induction chemotherapy plus irradiation – 5 – year results // Brit. J. Radiology. – 1990. – Vol. 63 – P. 340–345.
8. De Luna G.C., Caravaca A., Martin A.M., Anaja A.S. Carcinoma adenoideoquístico orofaringeo // Rev. int. otorinolaringol. – 1998. – Vol. 25, №1. – P. 35–37.
9. Dobrowsky W., Naude J. Influence of the hemoglobin on radiotherapy of the head and neck, retrospective analysis of three trials // Radiother. oncol. – 2000. – Vol. 56, (suppl. 1). – Abstr. 329.
10. Forastiere A.A., Urba S.G. Single agent paclitaxel and paclitaxel plus ifosfamide in the treatment of the head and neck cancer // Semin. Oncol. – 1995. – Vol. 22. – P. 24–27..