Aim: To study remote results and the role of intraarterial chemotherapy with local hyperthermia in the treatment of nasal and paranasal sinus cancer patients.

Methods: 209 patients were treated over the period 2000 - 2008. T3 stage was diagnosed in 106 patients (51.4%) and T4 stage in 103 (48.6%) patients. Squamous cell carcinoma was found in 71.3% patients. Patients were divided into 4 groups: 1) intraarterial chemotherapy with local hyperthermia and radiotherapy (58 patients; 2) intraarterial chemotherapy and radiotherapy (48 patients; 3) systemic chemotherapy and radiotherapy (58 patients); 4) radiotherapy followed by surgery (45 patients). We used the following regimen: cisplatin 100 mg, fluorouracil 3000 mg and doxorubicin 60 mg. In 1st group 58 patients received local UHF–hyperthermia with the frequency of 40 MHz increasing the temperature up to 41-43°C in the tumour. Patients of the 1st and 2nd groups, received intraarterial chemotherapy with ligation and catheterization of external carotid artery. All patients received telegammatherapy, dose 40-60 Gy. For appreciating of the remote results SPSS-16 statistical methods were used.

Results: Continuous regional intraarterial chemical induction in the background of local hyperthermia significantly increased the results of treatment. Surgical treatment was made to 128 (61.2%) patients at second grade of complex therapy. In the 1st group of patients 3-year survival rate was 83.4%, and 5-year survival rate was 73.0%. In the 2nd group those rates were 80.4% and 66.7%, respectively. In the 3rd group those rates were 68.2% and 60.6%, respectively. In the 4th group those rates were 68.1% and 54.1%, respectively. In the study of long-term treatment outcomes of patients receiving integrated and combined treatment it was found that the recurrence rate in the 1st and 2nd groups compared with the 3rd and 4th groups of patients differed significantly. So in the 1st group these figures were 32.4% in the 2nd group 38.1%, and in the third group recurrence was seen in 45.4% of patients. In the 4th group this figure increased further and was observed in 51.3% of patients.

Conclusions: Thus, neoadjuvant continuous intraarterial chemotherapy with local UHF-hyperthermia and radiotherapy in the 1st group of patients allowed us to increase significantly the remote results compared with those in the 3rd group who received systemic chemotherapy.

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