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INDICATIONS AND CONTRAINDICATIONS TO INTRAARTERIAL CHEMOTHERAPY CONDUCTION WITH LIGATION AND CATHETERIZATION OF EXTERNAL CAROTID ARTERY FOR PATIENTS WITH NASAL, PARANASAL AND MAXILLA SINUS CANCER

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Abstract. 125 patients with locally advanced nasal, paranasal and maxilla sinus cancer of stages T₃ и T₄ who were made ligation and catheterization of external carotid artery with neo-adjuvant intraarterial polychemotherapy. We worked out indications and contraindications for performance of the method of continuous intraarterial polychemotherapy with catheterization of the external carotid artery. There determined indications and contraindications for external carotid ligation. After performance of external carotid ligation, in 105 (84%) patients, reduction of tumor sizes, precancerous edema, evident pain syndrome due to loss of lesion site supply and arrest of acute and chronic bleeding were followed, that corresponds with observations of other investigators. In 5 cases, when catheter was introduced into the branch of external carotid artery and then into facial artery the pain syndrome was more evident. Administration of catheter in external carotid artery has been more proved in these cases. The technique developed is a high effective method promoting reduction of tumor sizes and pain syndrome. Their usage result in reduction of intraoperative and postoperative blood loss, as well as it has diagnostic significance: lymph dissection to verify the tumor lesion. Administration of chemicals via catheter to the tumor site provides increase in their concentration in the tumor for more prolonged period that enhances the therapeutic effect.

Key words: ligation and catheterization of external carotid artery, cancer, nasal and paranasal sinus, maxilla, intraarterial chemotherapy.

Nasal, paranasal, maxilla sinus cancer makes up 0, 2-2% among all malignancies [1, 4-6, 11]. First of all, the difficulty of its treatment is conditioned by anatomic and topographic constitutional peculiarity, closeness of vital organs, tumor quick spread on adjacent structures, advanced stage of tumor and neglect of tumor process and emergent bleeding [4,12]. Literature data are evidence of constant growth of malignancies of this localization [3, 6].

One of the perspective methods is to increase the efficiency of drug therapy is considered the use of intraarterial regional chemotherapy with introduction of chemical into main artery supplying with blood tumor site, that can obtain maximum lesion of tumor at minimum exposure of chemicals on different body organs and systems. [2, 8, 10].

The aim of present work is to define indications and contraindications to perform intraar-

terial chemotherapy for patients with nasal, paranasal and maxilla sinus cancer made by external carotid catheterization.

Material and methods

The treatment was performed on 125 patients with locally advanced nasal, paranasal and maxilla sinus cancer of stages T₃ и T₄ in the Head and Neck department of NORC MH RUz from 2000 to 2007 y.y. These patients were made external carotid ligation and catheterization and they received neo-adjuvant intraarterial polychemotherapy. Patients ranged from 15 to 75 years old.

We worked out and improved the technique of intraarterial chemotherapy with ligation and catheterization of the external carotid artery to improve complex treatment for patients with locally advanced nasal, paranasal and maxilla sinus cancer. Catheterization was performed into external carotid artery as immediate catheterization of maxillary artery has not been carried out in most cases due to high level of its separating of external carotid artery trunk.

Results and discussion

We have developed indications and contraindications to perform the procedure [7]. Indications to use continuous intraarterial chemotherapy with catheterization of the external carotid artery are: patients with locally advanced maxilla, nasal and paranasal sinus cancer; patients with locally advanced malignancies of maxilla, nasal and paranasal sinuses and who have small, solitary, movable lymph nodes in operation site, in bifurcation area of common carotid artery; patients with locally advanced maxilla, nasal and paranasal sinus cancer who have bleedings from tumor. After performing external carotid ligation within catheterization there observed reduction of precancerous edema, evident pain syndrome due to loss of lesion site supply and arrest of acute and chronic bleeding.

Contraindications for the performance of the method are: patients with locally advanced malignancies of maxilla, nasal and paranasal sinuses who have unilateral, solitary immovable or multiple cervical lymph nodes in which total volume of lymph nodes could not be removed radically.

Further, this complicates (anatomy is disturbed) performance of surgery of facial-sheath dissection of cervical cellulose. And also the patients who have bilateral cervical lymphonodes while continuous intraarterial chemotherapy conduction, chemical generally concentrates in tumor site and malfunctions on regional lymphonodes, in this connection, the performance of the therapy is not reasonable. And also the patients who have remote metastases, as well as concomitant diseases of cardio-vascular, urinary system, central and peripheral nerve systems and others.

After performing of external carotid ligation, in 105 (84%) patients, reduction of tumor sizes, precancerous edema, marked pain syndrome due to loss of lesion site supply and arrest of acute and chronic bleeding were followed, that corresponds with observations of other investigators [9]. In 5 cases, when catheter was introduced into the branch of external carotid artery and then into facial artery the pain syndrome was more evident. Catheterization of external carotid artery has been more proved in these cases.

Conclusion

Thus, definition of indications and contraindications to external carotid ligation, as well as its branches is a high effective method promoting improvement of treatment results and reduction of pain syndrome. Simultaneously, intraoperative and postoperative blood losses have been decreased. This procedure has a diagnostic value: lymph dissection to verify the tumorous lesion. Administration of chemicals via catheter to the tumor site provides increase in its concentration in the tumor for more prolonged period that enhances the therapeutic effect.

ПОКАЗАНИЯ И ПРОТИВОПОКАЗАНИЯ К ПРОВЕДЕНИЮ ВНУТРИАРТЕРИАЛЬНОЙ ХИМИОТЕРАПИИ ПУТЕМ ПЕРЕВЯЗКИ И КАТЕТЕРИЗАЦИИ НАРУЖНОЙ СОННОЙ АРТЕРИИ У БОЛЬНЫХ СО ЗЛОКАЧЕСТВЕННЫМИ ОПУХОЛЯМИ ПОЛОСТИ НОСА, ОКОЛОНОСОВЫХ ПАЗУХ И ВЕРХНЕЙ ЧЕЛЮСТИ

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Реферат. Проведено лечение у 125 больных с местнораспространенными злокачественными опухолями полости носа, околоносовых пазух и верхней челюсти Т3 и Т4 стадий, которым производилась перевязка наружной сонной артерии с проведением неоадьювантной внутриартериальной полихимиотерапии. Нами разработаны показания и противопоказания к проведению метода внутриартериальной длительной полихимиотерапии путем катетеризации наружной сонной артерии. Определены показания и противопоказания к перевязке наружной сонной артерии. После перевязки наружной сонной артерии, у 105 (84%) больных наблюдалось уменьшение размеров опухоли, преканцерозного отека, выраженного

болевого синдрома за счёт прекращения питания зоны поражения и остановки острого и хронического кровотечения, что соответствует наблюдениям других исследователей [9]. В 5 случаях, когда катетер вводили в ветвь наружной сонной артерии, а затем в лицевую артерию, болевой синдром был наиболее выражен. В этих случаях наиболее оправдано введение катетера в наружную сонную артерию. Разработанная методика является высокоэффективным методом, способствующим уменьшению размеров опухоли и болевого синдрома. Её применение снижает интраоперационные и послеоперационные кровопотери, а также имеет диагностическое значение: лимфодиссекция для верификации опухолевого поражения. Введение химиопрепарата через катетер в зону опухоли способствует увеличению его концентрации в опухоли на более длительное время, что усиливает лечебный эффект.

Ключевые слова: перевязка и катетеризация наружной сонной артерии, злокачественные опухоли верхней челюсти, носа и придаточные пазухи, внутриартериальная химиотерапия.

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