

However, if the tumor is large, causing discomfort, or if there is a suspicion of malignancy, surgical removal of the affected portion of the lung may be recommended. Surgery is typically a minimally invasive procedure with a favourable prognosis and low risk of recurrence [4].

### **Conclusion**

Pulmonary hamartoma is a benign lung tumor that typically does not cause significant health concerns. It is important to diagnose and manage this condition appropriately to alleviate symptoms and rule out the possibility of malignancy. Regular monitoring will ensure a favourable outcome for patients with hamartoma of the lung. With appropriate treatment, most patients with this disease can expect a good prognosis. According to our data, hamartoma is rarely associated with lung cancer.

In our study, out of 29 patients operated on for pulmonary hamartoma, in 1 case there was a combination of separately located nodes of hamartoma and cancer in one lung and malignisation of hamartoma was detected in 1 patient. Hamartoma of the lung is detected using radiation diagnostic methods. A comprehensive morphological study is required to verify the lesion.

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## **CLINICAL AND DEMOGRAPHIC CHARACTERISTICS OF PATIENTS WITH SALIVARY GLAND PATHOLOGIES (CANCER) IN THE GOMEL REGION IN 2015–2019**

### **Introduction**

There are 3 main major salivary glands found in the human body, also many tiny salivary glands throughout mouth. Parotid glands are the largest salivary glands and are found in front of and just below each ear. Most major salivary gland tumors begin in this gland, sublingual glands are found under the tongue in the floor of the mouth and submandibular glands are found below the jawbone [4]. All these glands work to produce saliva. Saliva has enzymes which helps in digest food and antibodies that help to protect against infections of the mouth and throat [1].

In 2022, the fifth edition of the WHO Classification was introduced by 39 salivary gland pathologies, which are divided into four categories: non-neoplastic epithelial lesions, malignant and benign epithelial tumors and mesenchymal tumors specific to the salivary glands [3, 4]. Salivary glands cancer is a rare malignant neoplasm cells form in the tissues of the salivary glands. The main morphological variants are adeno carcinoma and squamous cell carcinoma. The tumor affects the parotid glands in 90% of cases. Men over the age of 50 are more likely to

get the disease [2]. Most tumors are detected in stages III and IV. The disease is characterized by uneven statistical indicators in different regions. The standard methods of treatment are radiation therapy and surgical treatment [3]. Over the past 30–40 years, significant changes in the number and demographic structure of cases have been noted in Belarus.

### Goal

To analyze the demographic indicators and clinical parameters of salivary glands cancer among the contingent of patients in the Gomel region in 2015–2019.

### Material and methods of research

The accounting data of 63 residents of the Gomel region, who were diagnosed with lip cancer for the first time in their lives in 2015–2019 were analyzed. The study group included 31 men and 28 women, the average age of the patients was 62,4 years, the minimum was 16 years, and the maximum was 89 years. In all cases, the diagnosis of the neoplasm was histologically verified. Distribution by sex, by age groups, distribution of patients by stage, by histological variants, distribution by primary treatment method were studied. Statistical processing was performed using the Statistica 8.0 software package. The data were compared using Student's t test for parametric exponents and Fisher's  $\chi^2$  test for nonparametric exponents. Significance of the difference  $p < 0.05$ .

### The results of the research and their discussion

In the study group, carcinoma was localized on the salivary glands (Parotid and sublingual) in all observations. Morphological variants: squamous cell carcinoma – 21 cases, adenocarcinoma – 13 cases, Adenoid cystic carcinoma – 8 cases and others – 21.

Histological variants were presented in the following proportions (Figure 1).

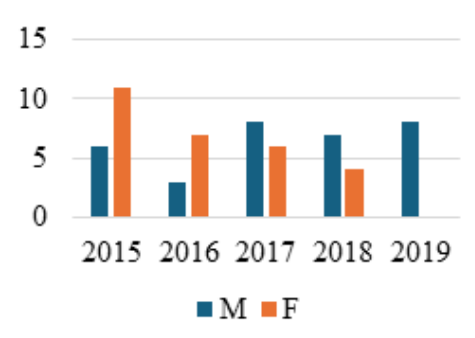


Figure 1 – Annual number of cases 2015–2019 and histology distribution

The analysis of the primary documentation revealed by the time of diagnosis, the salivary gland tumor had the following prevalence: stage I – 13 patients (20.63%), stage II – 16 (25.40%), stage III – 9 (14.29%), stage IV – 25 (39.68%). The data obtained generally correspond to those in the Republic of Belarus (Figure 2).

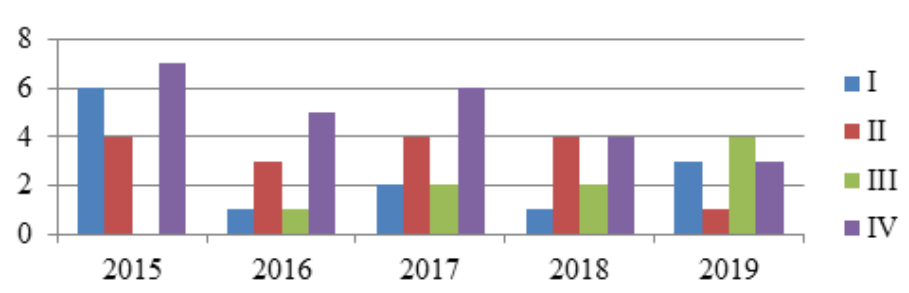


Figure 2 – Cases Distribution by stages in 2015–2019

By the time of diagnosis, Cancer of the parotid gland was detected in 46 patients (73.01%), submandibular were detected in 17 cases (26.98%) (Figure 3). The disease were detected in all stages but stages III–IV were detected clearly. This indicates a relatively favorable state of timely diagnosis of this cancer localization. However, taking into account the absolute visual accessibility of the palpable salivary glands and the characteristic clinical manifestations of the disease, the neglect of salivary glands should now be minimized. The proportion of stage III–IV cancer cases was 21 (33.33%) in men and 13 (20.63%) in women. The age of patients with stage III–IV carcinomas ranged from 54 to 89 some cases it may vary. Stage III–IV salivary glands cancer was more common in men. The average age in stages III and IV was 62.4.

The ratio of male to female cases was 1.87:1. At the same time, the average age of men was 64 years, standard deviation 8.3; (the indicator should look like an average + standard deviation), the average age of women is 52, the standard deviation is 7.2.

Primary treatment of salivary glands cancer was carried out by the following methods: surgical – 39 (61.91%), radiation – 7 (11.11%), surgical with radiation chemotherapy – 17 (26.98%). Most of the patients underwent surgical treatment for the both parotid and submandibular cancer [4].

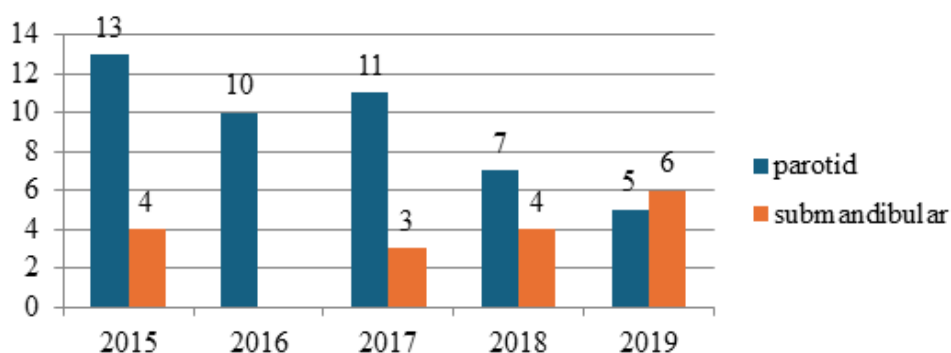


Figure 3 – Cases distribution by site (parotid or submandibular)

### Conclusion

The annual number of new cases of salivary glands in the Gomel region in 2015–2019 averaged about 15–20 cases. The ratio of men to women is 1.87:1. The tumor was detected in stages III and IV in 83.2% of patients and most of the cases were parotid gland cancer.

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