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DOES PULMONARY HAMARTOMA ASSOCIATED WITH LUNG CANCER? OUTCOMES OF 29 PULMONARY HAMARTOMA CASES

Introduction

Benign lung tumors are rare, with a frequency of 6–8% [1]. Among them, the most common is pulmonary hamartoma, which accounts for 3% of all lung tumors and 77% of benign lung tumors [1, 2, 3]. Hamartomas belong to mesenchymal tumors and consist of cartilaginous, fatty, connective, and smooth muscle tissue respiratory epithelium in various proportions. Depending on the predominance of a particular tissue, the following types of hamartomas are distinguished: chondromatous, adenomatous, fibromatous, and lipomatous [4]. Pulmonary hamartoma is more common in men (male to female ratio is 4:1), and especially in people more than 50 years of age [1, 4]. Clinical manifestations depend on the localisation and dimension of the hamartoma. The rate of lung cancer in patients with lung hamartomas is 6 times higher than the population risk, adjusted for age, sex and ethnicity [4]. Malignization of hamartomas is rare, so the study of these cases is a subject of further research.

Goal

To study the prevalence of pulmonary hamartoma among patients of Gomel clinical oncology center.

Material and methods of research

We studied analyzed 29 patients treated in the thoracic oncology department of Gomel clinical oncology center in the period from 2011–2021.

The results of the research and their discussion

Between 2011 and 2021, 29 cases of pulmonary hamartoma were observed in Gomel clinical oncology center. The mean age of the patients was 51±14.5 years (28–79 years). Hamartomas were diagnosed most frequently in 21 (72.4%) cases in males and 8 (27.6%) in females. In most cases 27 (93.1%) lung hamartomas were solitary masses, and only in 2 (6.9%) cases hamartoma was defined in the form of multiple nodules. All patients had asymptomatic neoplasms and were diagnosed incidentally during radiological examination. There is 1 patient a combination of separately located hamartoma nodules and cancer in one lung was noted. Malignisation of hamartoma was detected in 1 patient.

CT scanning is used to diagnose lung neoplasms. CT scan can provide information about the anatomical location, shape, density of the primary tumor, presence of extra-organ invasion, enlargement of lymph nodes, their location relative to surrounding structures. However, this diagnostic method does not provide specific information about the nature of the neoplasm [1, 3]. A comprehensive morphological examination is required to verify the lesion. The histological type of the lesion determines the further tactics of individual patient management and the prognosis of treatment [1, 3].

Therefore, the treatment for pulmonary hamartomas depends on various factors, including the size, location, and symptoms associated with the tumor. In most cases, small, asymptomatic hamartomas do not require treatment and may be monitored through regular imaging tests.

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.

LITERATURE

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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