

# MEDICUS

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## Original scientific paper

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Në çastin kur po hy në radhët e anëtarëve të profesionit mjekësor premtoj solemnisht se jetën time do ta vë në shërbim të humanitetit. Ndaj mësuesve do ta ruaj mirënjohjen dhe respektin e duhur.

Profesionin tim do ta ushtroj me ndërgjegje e me dinjitet. Shëndeti i pacientit tim do të jetë brenga ime më e madhe. Do t'i respektoj e do t'i ruaj fshehtësitë e atij që do të më rrëfëhet. Do ta ruaj me të gjitha forcat e mia nderin e traditës fisnike të profesionit të mjekësisë.

Kolegët e mi do t'i konsideroj si vëllezër të mi.

Në ushtrimin e profesionit ndaj të sëmurit tek unë nuk do të ndikojë përkatësia e besimit, e nacionalitetit, e racës, e politikës, apo përkatësia klasore. Që nga fillimi do ta ruaj jetën e njeriut në mënyrë absolute. As në kushtet e kërcënimit nuk do të lejoj të keqpërdoren njohuritë e mia mjekësore që do të ishin në kundërshtim me ligjet e humanitetit. Këtë premtim po e jap në mënyrë solemne e të lirë, duke u mbështetur në nderin tim personal.

## **The Oath of Hippocrates**

Upon having conferred on me the high calling of physician and entering medical practice, I do solemnly pledge myself to consecrate my life to the service of humanity. I will give my teachers the respect and gratitude which is their due. I will practice my profession with conscience and dignity. The health of my patient will be my first consideration. I will respect the secrets which are confided in me, even after the patient has died. I will maintain by all the means in my power, the honor and the noble traditions of the medical profession.

My colleagues will be my brothers.

I will not permit considerations of religion, nationality, race, party politics or social standing to intervene between my duty and my patient. I will maintain the utmost respect for human life from its beginning even under threat and I will not use my medical knowledge contrary to the laws of humanity. I make these promises solemnly, freely and upon my honor

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# SALIVARY GLAND ADENOID CYSTIC CARCINOMA: CASE REPORT

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## ABSTRACT

Adenoid cystic carcinoma (AdCC) is a rare carcinoma of unknown etiology, originating from the secretory glands. It is one of the most dominant malignant salivary tumors. It occurs across all age groups, but is more prevalent between the ages of 50 and 70, and is more common in women than in men. It is a slowly growing aggressive tumor, characterized by perineural invasion and late metastases. The symptoms of AdCC are generally nonspecific, and the clinical diagnosis of AdCC can be challenging, partly due to its heterogeneous histopathology and its indolent growth. Due to its rarity, it is difficult to predict which therapeutic methods are most optimal, especially given the occurrence of many late recurrences. In this paper, we present our clinical experience in the treatment of this carcinoma, accompanied by a case presentation. The case order encompasses preoperative planning, the surgical intervention, and postoperative monitoring and oncological treatment.

Keywords : salivary gland; adenoid cystic carcinoma; case report

## INTRODUCTION

Adenoid cystic carcinoma (AdCC) is a rare type of malignancy with an as yet unknown etiology that originates from the secretory glands (1). Specifically, it is one of the most common malignant salivary tumors, accounting for approximately 10% of all tumors in the major salivary glands and 30% of all tumors in the minor salivary glands (2). However, its occurrence is not limited solely to the salivary glands, but also extends to other locations in the head and neck region, as well as in secretory glands outside of the head and neck area, such as in the esophagus, chest, and lungs. It can manifest at all ages, but is most prevalent in the fifth or sixth decade of life, with approximately 60-70% of patients being women (3).

AdCC manifests with nonspecific symptoms, making clinical differentiation from benign tumors challenging. It is characterized by slow growth and perineural invasion, and in many cases, it poses a difficult differential diagnosis due to the lack of reliable diagnostic markers (4).

Clinically, AdCC typically manifests as a painless, slowly growing tumor mass and may often remain asymptomatic until it induces neurological deficits due to perineural spread. These factors contribute to its late diagnosis, and its biological characteristics complicate long-term management (5,6). Even with extensive surgical resection and adjuvant radiotherapy, recurrences are a frequent occurrence. This phenomenon is largely attributed to the subclinical dissemination of the tumor within the nerve sheaths and vascular pathways, which undermines the

efficacy of standard local therapies (7).

The primary treatment consists of radical surgical intervention, often accompanied by adjuvant radiotherapy. However, despite the aggressive treatment regimen, late recurrences (15-85%) and distant metastases (25-55%) are common, particularly manifesting late, beyond five years or even more than ten to fifteen years after the completion of the primary treatment. It is presumed that this phenomenon arises from perineural invasion beyond surgical margins and microscopic hematogenous dissemination during the early phase of the disease. Due to the slow growth and indolent clinical course of AdCC, the five-year survival rates are 80-85%; however, the ten- and fifteen-year survival rates decline to 50-60%.

In this paper, we present our clinical experience in the treatment of this carcinoma, accompanied by a case presentation. In accordance with the ethical principles of research involving human subjects and the Helsinki Declaration, written informed consent for the case study was obtained from the patient.

## CASE PRESENTATION

### History of the patient and clinical findings

A 68-year-old female patient presented for examination at the Department of Maxillofacial Surgery, Clinical Hospital Štip, in December 2024, having been referred by her primary care physician due to paresis of the right facial nerve. Several months prior, the patient had been referred by a neurologist for physical therapy and treated by a physiotherapist due to suspicion of a cerebral stroke, which resulted in left-sided facial paresis.

### Diagnostic Assessment

During the initial clinical examination, left-sided facial paresis was detected, characterized by an inability to wrinkle the forehead, an inability to close the left eye, and a depressed left corner of the mouth. In the left parotid region, a tumor formation was palpated, immobile, painless, and approximately the size of a mandarin.



Figure 1

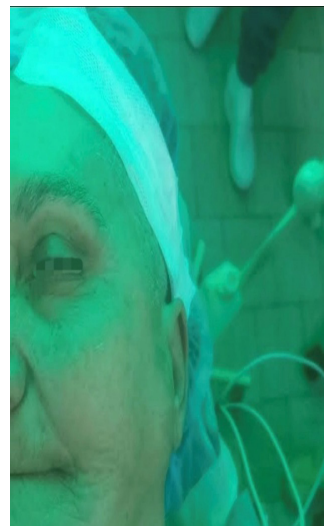


Figure 2



Figure 3

Figure 1, 2, 3, - The preoperative condition of the patient

The ultrasound sonography conducted has revealed the presence of a tumor mass in the left parotid gland. A fine needle aspiration biopsy (FNAB) was performed, resulting in a diagnosis of adenoid cystic carcinoma. A CT scan of the head with contrast was carried out, during which the tumor formation was visualized, yet no focal lesions were noted within the cerebral structures.

#### Surgical Intervention

An indication for surgical treatment was established. The operation was performed in the operating room. A radical excision of the tumor was conducted, along with the complete removal of the parotid gland (total parotidectomy), with identification and preservation of the intact portion of the facial nerve. An active Redon drain was placed.



Figure 4



Figure 5



Figure 6

Figure 4,5,6 Surgical Intervention and Intraoperative Findings



Figure 7 Branches facialis

#### Postoperative course and outcomes

Postoperatively, the patient was treated at the Oncology Clinic with radiotherapy. Regular follow-up examinations were conducted one month postoperatively (during the first six months) and every three months thereafter. At six and twelve months postoperatively and post-radiation, a CT scan of the head was performed. No recurrences or regional metastases were observed. During the follow-up examinations, moderate left-sided facial paresis remains present. Following the last examination in June 2026, the patient was referred to the Department of Physical Medicine and Rehabilitation for treatment of the residual facial paresis.

## CONCLUSIONS

AdCC represents rare carcinomas, and the limited number of studies with larger cohorts complicates the extraction of general conclusions. AdCC is an uncommon disease, primarily affecting the middle-aged population, and is more prevalent among women than men. In the region of the head and neck, it affects both the minor and major salivary glands. Its diagnosis is not always straightforward, and distinguishing it from benign tumors or other types of tumors presents a clinical challenge. According to some studies (8,9,10,11,12) among patients with AdCC in the head and neck region, the prognosis has been better for those with tumors arising from major salivary glands compared to those with tumors originating from minor salivary glands. Patients with stage I-II of the disease generally exhibited better outcomes than those with stage III-IV, while gender, smoking, and age typically did not influence the results. Multimodal therapy proved superior to monotherapy, regardless of radical surgery or perineural invasion. However, there is no plateau in the survival curves, and therefore, a longer follow-up period for these patients is recommended. Consequently, based on current data, we propose that AdCC receive multimodal treatment, and the follow-up should extend beyond 5 years, as no plateau in the survival curves is observed after 15 years of monitoring.

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