

## **Streszczenie w języku angielskim**

### **Surgical treatment of salivary gland pathologies – analysis of epidemiology and functional and oncological outcomes over 10 years in one institution.**

#### **Introduction**

Surgical management is the standard method of diagnosis and treatment of salivary gland pathologies. It applies to all types of lesions, both non- neoplastic and neoplastic. Salivary gland pathologies have a diverse clinical presentation and require an individual therapeutic approach. Patients with particular diseases are characterized by a different structure of age, sex and location of lesions. Most non-neoplastic lesions are treated conservatively, only some require surgical treatment. For primary salivary gland cancers, the standard treatment is radical surgical resection, except non-Hodgkin's lymphoma.

In this study, we analyzed epidemiological and clinical data of patients surgically treated for salivary gland pathologies over a 10-year period in one institution. The aim of presented manuscript was to verify current indications for surgical treatment of salivary gland diseases. Analysis was based on epidemiological and clinical data and the impact of those factors on the functional and oncological results.

#### **Manuscript 1**

**Kucharska E**, Rzepakowska A, Cieślik M, Wilemska S, Bara M, Osuch-Wójcikiewicz E, Niemczyk K. "Indications for surgical treatment of major salivary gland pathologies with epidemiology analysis in adults – cohort study of 1173 cases". *Otolaryngol Pol* 2022; 6: 7-14. doi.org/10.5604/01.3001.0015.8056.

The first publication presents epidemiological data of surgically treated patients for salivary gland pathologies collected over a period of ten years (2010-2020) in one institution. The retrospective analysis was based on the 1173 postoperative pathological studies of the salivary glands. Analysis included pathologic diagnosis, most common indication for surgical treatment, location of lesions, multifocality, radicality of the resection, lymph node involvement, as well as patient's demographic data such as sex and age.

## **Manuscript 2**

**Kucharska E**, Rzepakowska A, Żurek M, Pikul J, Daniel P, Oleszczak A, Niemczyk K. Oncologic outcomes of the most prevalent major salivary gland cancers: retrospective cohort study from single center. *Eur Arch Otorhinolaryngol.* 2024;281(8):4305-4313. doi: 10.1007/s00405-024-08650-9.

This retrospective search of medical database identified 116 patients treated surgically with malignant tumors of salivary gland between 2010 and 2020 in one institution. The analysis included demographic data, clinical course, type of surgical and adjuvant treatment, histological type and margin status, perivascular infiltration (LVI), neural invasion (PNI), and metastatic lymph nodes (LN). In addition, facial nerve function, recurrence-free survival, and overall survival were assessed.

## **Manuscript 3**

**Kucharska E**, Rzepakowska A, Winiarska N, Krupa Z, Zając A, Niemczyk K. Revision parotidectomy – analysis of indications for the procedure and treatment results based on 10 years of follow-up in a single center. *Otolaryngol Pol.* 2024;78(5):24-32. doi.org/10.5604/01.3001.0054.6857.

The study is a retrospective review, that included 72 patients who underwent revision ipsilateral resection of parotid gland pathology. The main reason for parotid gland reoperation was the recurrence of pleomorphic adenoma, that was identified in 48 (66.7%) patients. Revision surgery is recommended treatment for recurrent tumors both benign and malignant. It is also associated with an increased risk of facial nerve impairment and a significant tumor recurrence rate. The need for revision surgery is inevitable also in cases of malignant tumors resected non-radically or without the proper surgical margins, according to the final histopathology. Article presents demographic data, clinicopathological variables and surgical details influencing recurrence-free survival. It also evaluated the function of the facial nerve after surgical interventions.

## **Summary**

Salivary gland pathologies are a diverse group of diseases requiring an individual diagnostic and therapeutic approach. The series of three publications present indications for surgical treatment and assess the epidemiological structure of patients treated with this method. The results presented in the articles enable a more accurate assessment of clinical course of the disease, the planning of appropriate treatment and the determination of accurate prognosis.