



## Introduction

Acromegaly is a relatively rare endocrine condition caused by growth hormone oversecretion by pituitary adenoma. Its most frequent complications include cardiovascular and respiratory system diseases with high tendency of neoplastic transformation and increased risk of benign and malignant tumors. The aim of this retrospective study was to assess the prevalence of benign and malignant neoplasms in patients with acromegaly.

## Study group, methods

We have searched the medical documentation of patients treated in our medical center from the years 2004-2013. The prevalence of benign and malignant neoplasms was analyzed basing on the latest available records of particular patients.

## Results

We have identified 180 patients with acromegaly (108 women, 72 men). The mean age at the time of last available assessment was 52.5 years (standard deviation 12.2, median – 54.0). The most common neoplastic comorbidity was observed in the thyroid -140 patients (77.8%) - 110 patients with multinodular goiter (MNG) (61.1%) or resection of MNG in the past medical history. Adrenal adenomas were diagnosed in 9 subjects (5%), prostate hyperplasia in 6 (8.3% of males), and polyps of the colon in 1.7% of all individuals. Among malignancies, the most common were thyroid cancer (n=11, 6.1%), breast cancer (n=5, 4.6% of women with acromegaly) and colonic cancer (n=4, 2.2%).

<b>Acromegalic patients</b>	
<b>age [years]</b> mean ± SD median range	52.6 ± 12.2 54.0 22 - 83
<b>gender</b>	108 F / 72 M
<b>Thyroid lesions</b>	140 (77.8%)
<b>Multinodular goiter</b>	110 (66.8%)
<b>Thyroid cancer</b>	11 (5.4%)
<b>Adrenal adenoma</b>	9 (5%)
<b>Polyps of the Colon</b>	1.7%
<b>Benign prostate hyperplasia</b>	6 (8.3% of males)
<b>Colon cancer</b>	4 (2.2%)
<b>Breast cancer</b>	5 (4.6% of females)

Tab.1. General characteristics of the study group (age, gender, co-existing neoplasms)

## Conclusions

Patients with acromegaly have high risk of goiter, thyroid lesions and thyroid cancer, which was present in medical histories of over 6% of patients. Among other malignancies, breast and colonic cancer were most frequent. According to our results, active screening for potential malignancies should be an important part in the management of acromegaly.