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## Introduction

Increasing evidence is available for the role of prolactin in the development of various cancers. The purpose of this study is to evaluate the frequency of thyroid cancer in patients with prolactinoma followed up at a single site.

## Methods

Medical records of 182 patients, diagnosed with prolactinoma, were reviewed retrospectively. Out of these patients, 114 patients (103 female patients, 11 male patients, mean age  $35 \pm 10.4$ ), who had undergone thyroid ultrasonography (US), were included in the study. Serum prolactin, anti-thyroglobulin (antiTg), anti-thyroid peroxidase antibody (anti TPO), thyroid stimulating hormone (TSH), free T4 (fT4), free T3 (fT3) values, and pituitary gland magnetic resonance imaging (MRI) and US reports were evaluated.

## Results

It was found that 45(39.5%) patients had thyroid nodule (13 solitary, 32 multiple) 10 patients were administered thyroidectomy, and differentiated thyroid cancer (DTC) was detected in 6 of these patients (5.3%). 1 patient had lung metastasis. Control group consisted of 113 individuals (101 females, 12 males, mean age  $32.1 \pm 9.1$ ). In US, 28 of these individuals (24.8%) had thyroid nodule (5 solitary, 23 multiple). 1 individual (0.8%) had DTC.

## Conclusion

When compared to control group, thyroid volume and thyroid nodularity were significantly higher in patients with prolactinoma (respectively,  $p < 0.001$ ,  $p = 0.018$ ), however, no statistically significant difference was available for the incidence of thyroid cancer ( $p = 0.196$ ).

