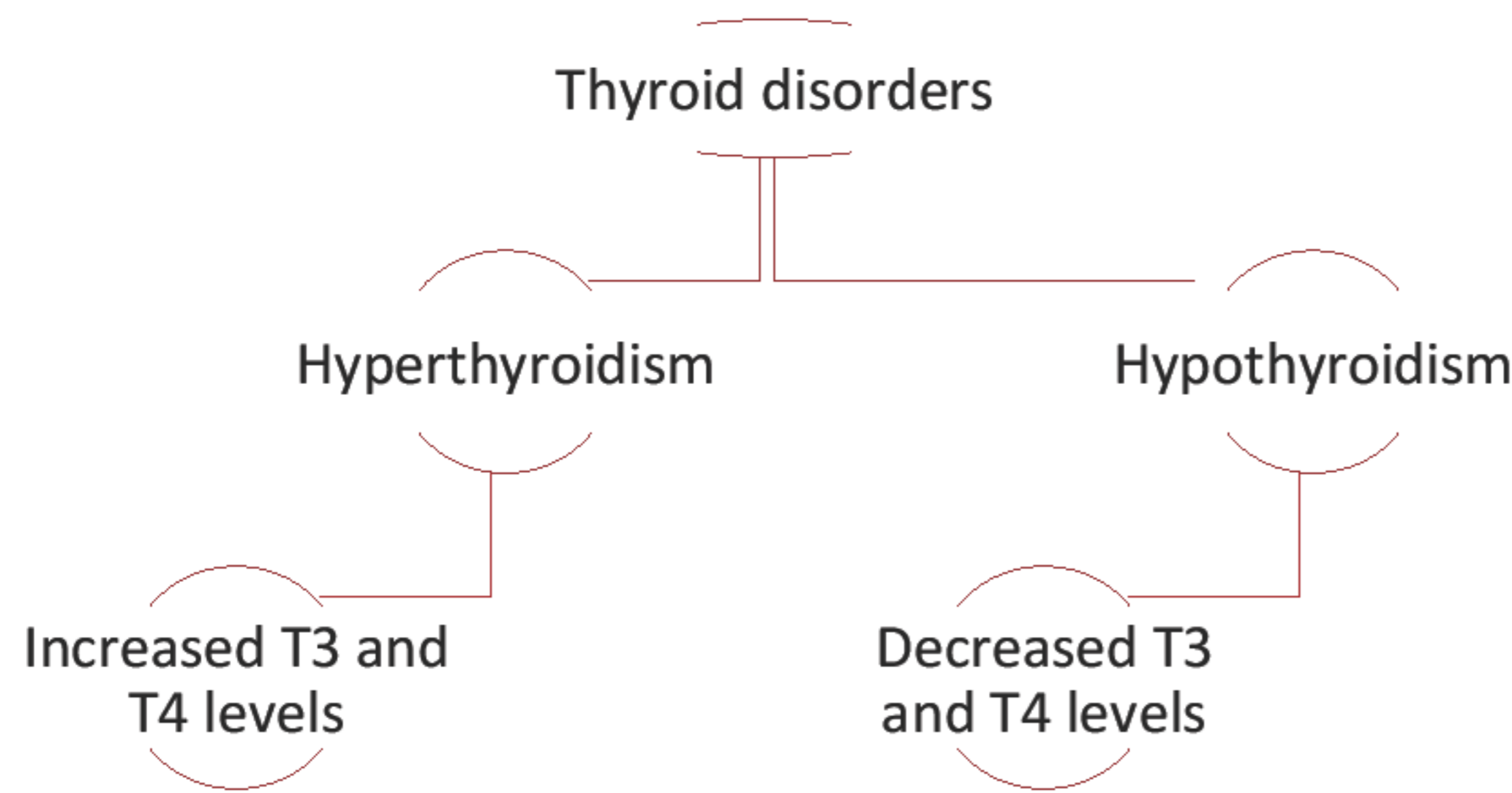


Clinical and epidemiological profile of patients with hyperthyroidism and hypothyroidism that receive endocrinological services from a medical institution in Medellín (Colombia) between 2013 and 2015

Introduction

Endocrine illnesses have high prevalence on a global level due to multiple etiologies that can lead alterations to this system.



General objective

Determine the epidemiological profile of hyperthyroid and hypothyroid patients that receive endocrinological services from a medical institution in Medellín (Colombia) between 2013 and 2015.

Methodology

- **Study Type:** A descriptive, retrospective study was conducted and included the clinical records of patients diagnosed with hyperthyroidism or hypothyroidism. A univariate analysis was applied using descriptive statistics by means of absolute frequencies and proportions in the SPSS software, version 19.0.
- **Population:** Clinical files of patients with hyper/hypothyroidism who were in treatment for this pathology.
- **Data collection:** Was done using a form designed by the research group in which all the necessary data for the description of the clinical and epidemiological profile was included.
- **Data analysis:** Univariate analysis was performed with descriptive statistics through absolute frequencies and proportions in SPSS® v19.0 program.
- **Ethics:** The research was approved by the Ethics Committee of the university, the confidentiality of the data contained in clinical records was kept and it was classified as an investigation without risk according to the 008430 Colombian Ministry of Health Resolution of 1993.

Results

In the study of 159 patients, 131 had hypothyroidism and 18 hyperthyroidism, the middle age was 56.7±17.8 years and 55.6±15.1 years, respectively.

Table 1. Main causes of hypo/hyperthyroidism in study population

Causes	Hypothyroidism	Hyperthyroidism
Hashimoto disease	5.3%	0.0%
Graves disease	0.0%	33.3%
Post surgical	11.5%	0.0%
Panhypopituitarism	0.8%	5.6%
Thyrotoxicosis	0.0%	22.2%
Multinodular goiter	3.1%	16.7%
Thyroid nodule	0.8%	5.6%

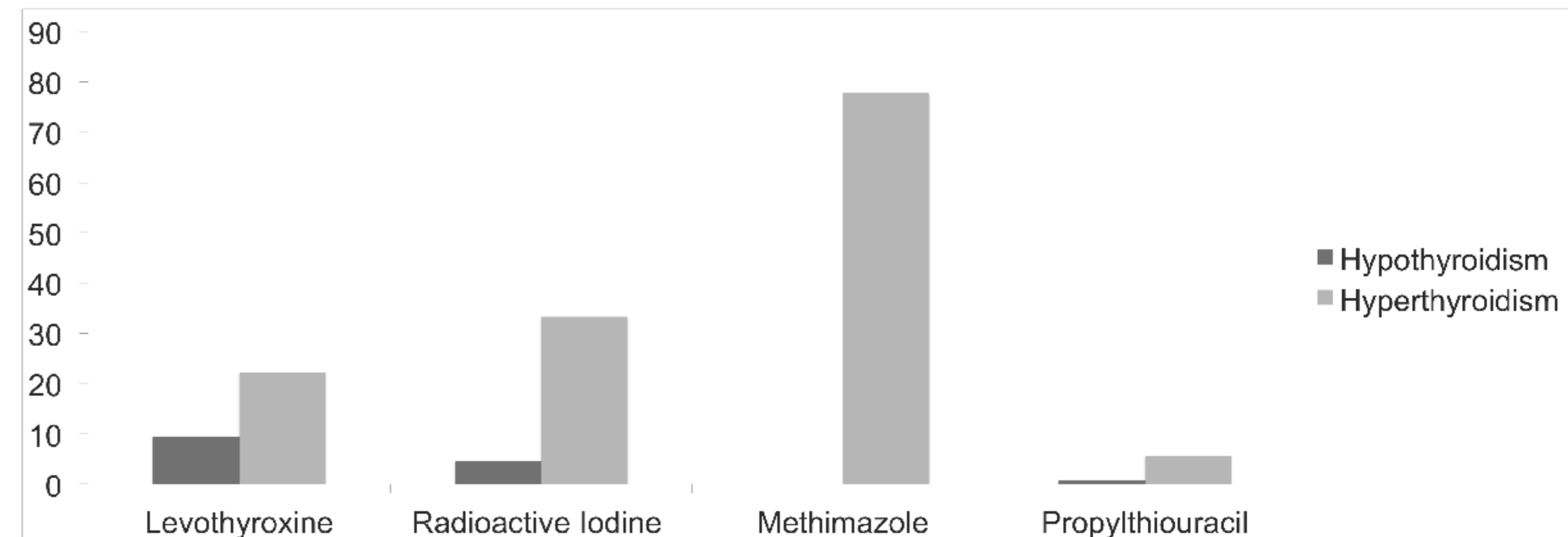
The main signs and symptoms of the studied patients can be appreciated in Table 2. The goiter was common in 14.5% and 38.9% of hypo and hyperthyroidism.

Table 2. Common signs and symptoms

Signs and symptoms	Hypothyroidism	Hyperthyroidism
Headache	26.0%	33.3%
Fatigue	26.7%	27.8%
Tachycardia	2.3%	27.8%
Exophthalmos	0.8%	27.8%
Palpitations	4.6%	22.2%
Weight loss	3.1%	22.2%
Anxiety	12.2%	11.1%
Weight gain	3.8%	11.1%
Hair loss	4.6%	5.6%

In the Figure 1 can be observed the principal treatments in each pathology, with levothyroxine and methimazole as the main drugs in hypothyroidism and hyperthyroidism respectively.

Figure 1. Main treatments in hypo/hyperthyroidism



Conclusion

The results align with what is described in the literature of both pathologies, being more common in women with primary gland dysfunction. In relation to classic symptoms of the disease such as fatigue and adynamia, neither were the most relevant in this study.

Conflicts of interest

The authors declare no conflicts of interest.

Bibliography

- Ling Y, Jiang J, Gui M, Liu L, Aleteng Q, Wu B, et al. Thyroid Function, Prevalent Coronary Heart Disease, and Severity of Coronary Atherosclerosis in Patients Undergoing Coronary Angiography. *Int J Endocrinol Metab.* 2015; 1-9.
- Yang MH, Yang FY, Lee DD. Thyroid Disease as a Risk Factor for Cerebrovascular Disease. *J Stroke Cerebrovasc Dis.* 2015;24(5):912-20.
- Delitala AP, Terracciano A, Fiorillo E, Orrù V, Schelssinger D, Cucca F. Depressive symptoms, thyroid hormone and autoimmunity in a population-based cohort from Sardinia. *Journal of Affective Disorders.* 2016; 191; 82-87.