

## **Thyroidectomies in Italy: A Population-Based National Analysis from 2001 to 2018**

Thyroid. 2022 Mar;32(3):263-272.

**Pierannunzio D, Fedeli U, Francisci S, Paoli A, Toffolutti F, Serraino D, Zoppini G, Borsatti E, Di Felice E, Falcini F, Ferretti S, Giorgi Rossi P, Gobitti C, Guzzinati S, Mattioli V, Mazzoleni G, Piffer S, Vaccarella S, Vicentini M, Zorzi M, Franceschi S, Elisei R, Dal Maso L**

### Abstract

#### Background

The incidence of thyroid disease is generally increasing, and it is subject to major geographic variability, between and within countries. Moreover, the incidence rates and the proportion of overdiagnosis for thyroid cancer in Italy are among the highest worldwide. This study aimed to estimate population-based frequency and trends of thyroidectomies in Italy by type of surgical procedure (total/partial), indication (tumors/other conditions), sex, age, and geographical region.

#### Materials and Methods

Age-standardized rates (ASRs) of thyroidectomies were estimated from 2001 to 2018 using the national hospital discharges database

#### Results

In Italy, ASRs of thyroidectomies were nearly 100 per 100,000 women in 2002-2004 and decreased to 71 per 100,000 women in 2018. No corresponding variation was shown in men (ASR 27 per 100,000 men) in the overall period. A more than twofold difference between Italian regions emerged in both sexes. The proportion of total thyroidectomies (on the sum of total and partial thyroidectomies) in the examined period increased from 78% to 86% in women and from 72% to 81% in men. Thyroidectomies for goiter and nonmalignant conditions decreased consistently throughout the period (from 81 per 100,000 women in 2002 to 49 in 2018 and from 22 to 16 per 100,000 men), while thyroidectomies for tumors increased until 2013-2014 up to 24 per 100,000 women (9 per 100,000 men) and remained essentially stable thereafter.

#### Conclusions

The decrease in thyroidectomies for nonmalignant diseases since early 2000s in Italy may derive from the decrease of goiter prevalence, possibly as a consequence of the reduction of iodine deficiency and the adoption of conservative treatments. In a context of overdiagnosis of thyroid cancer, recent trends have suggested a decline in the diagnostic pressure with a decrease in geographic difference. Our results showed the need and also the possibility to implement more conservative surgical approaches to thyroid diseases, as recommended by international guidelines.

Keywords: Italy; age-standardized rates; thyroid surgery; thyroidectomies; time trends.

#### **FULL TEXT**

<https://pubmed.ncbi.nlm.nih.gov/35018816/>