Thyroid cancer : Description and rise in incidence in the French Marne-Ardennes thyroid cancer registry from 1975 to 2019

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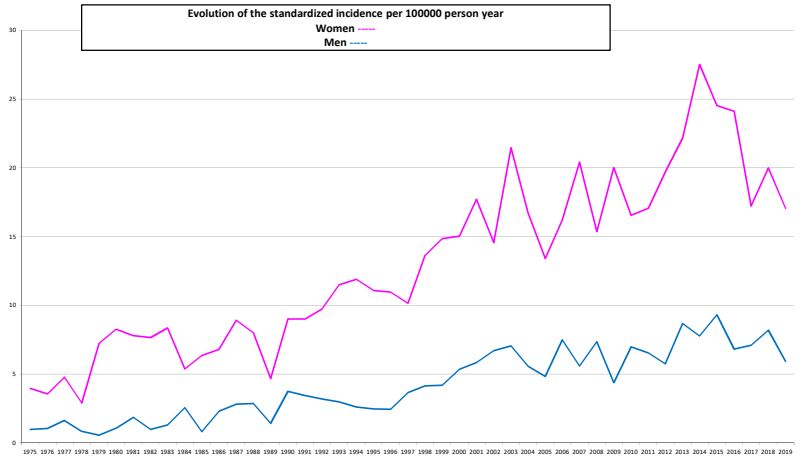
Context: Yearly incidence of thyroid cancer (TC) increased sharply in the past decades, due to improvements and better use of diagnostic procedures, enabling detection of smaller tumors.
Objectives: The aim of our study was to confirm the increasing incidence, to describe the characteristics, circumstances of discovery, and to examine the evolution of treatments and survival of TC, based on the French Marne-Ardennes registry for 1975-2019.
Design: This was a retrospective observational cohort study.
Results: 3262 patients with TC were included between1975 and 2019, with an average of 72 new cancer case per year. Standardized incidence per 100,000 patient-years increased from 2.8 to 13.3 in women for the period 1975-1984 to 2005-2019 and from 1.1 to 5 for men. The peak of incidence was in 2015 and incidence begins to decline since. Incidence increased more in ≥50 year-olds than in <50 year-olds. 14.5% of TC were discovered incidentally in 1975-1979 and above 30% in the last period 2015-2019. Size at discovery decreased from 35.2 mm to 16.5 mm. Small cancer under 10 mm represented only 18% in 1975-1984 and more than 44% in 2005-2015. Papillary TC increased the most representing 53.6% in 1975-1979 and 84.6% in 2015-2019 ; medullary TC and anaplastic TC seams more stable. Lymphe node invasion and metastasis at diagnosis decreased. Total thyroidectomy was more performed with the years and complications like hypoparathyroidism and vocal cord paralysis decreased. TC were associated with excellent survival and low progression, complete remission improved from 70 to 80%.
Conclusion: The present study confirmed the large rise in incidence of TC with a peak in 2015. Changes in access to health care and in physicians' and pathologists' practices are likely explanations for our findings.



Evolution of the standardized incidence per 100,000 person-years