

Epidemiology of thyroid cancer in Ireland : a quieter epidemic

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Background:

The epidemiology of thyroid cancer has changed radically in the recent past, with rising international incidence of early-stage papillary thyroid cancer (PTC) in particular. In this paper, we review the epidemiology of thyroid cancer in Ireland.

Methods:

A retrospective cohort study of National Cancer Registry of Ireland data, 1994-2019.

Results:

Records from 4,158 patients were analyzed. 73% (n=3,040) were female. The average age was 50 years. Gender did not change over time ($p=0.662$), while age decreased significantly ($p<0.0001$). The most common diagnoses were PTC (n=2,905, 70%) and follicular thyroid carcinoma (n=549, 13%). Incidence rose over threefold (1.8 to 6.2 cases/100,000 person-years). The incidence of T1 PTC rose over twelvefold (0.2 to 2.1 cases/100,000 person-years), while the incidence of stage III and IV disease did not change significantly. 38% (n=1,571) of cases were treated in the Dublin/Mid-Leinster region, compared with 23% (n=950) in the South of Ireland. The proportion treated in Dublin/Mid-Leinster rose significantly ($p<0.001$). Five-year disease-specific survival was 85% and varied significantly by diagnosis: 97% for PTC versus 5% for anaplastic thyroid carcinoma.

Conclusion:

The epidemiology of thyroid cancer in Ireland has changed dramatically reflective of international trends.