

Risk of malignancy in Thy3 thyroid nodules: a cohort study of 136 patients

Paraskevi Karamitsou, Carlos Galan, Anant Patel, Ahmad Moinie, George Mochloulis, **Panos Dimitriadis**

Lister Thyroid Centre, East and North Hertfordshire Teaching NHS Trust, Stevenage, SG1 4AB, UK.

Background: Thy3 cytology represents an indeterminate category with variable reported malignancy rates, often leading to diagnostic hemithyroidectomy. Reported risks differ significantly between centres, making patient counselling challenging.

Objective: To determine the local risk of malignancy in Thy3a and Thy3f thyroid nodules following a change towards a more selective surgical approach.

Design: A retrospective review of all patients undergoing surgery for Thy3 cytology over a 5-year period in a single endocrine surgical unit. Final histology was correlated with pre-operative cytology.

Results: A total of 136 patients underwent surgery for Thy3 nodules. Of these, 109 were Thy3a and 27 Thy3f. Malignancy was confirmed in 19.3% of Thy3a nodules and 44.4% of Thy3f nodules. These rates were notably higher than those quoted in national guidance and varied from published series. The higher malignancy yield coincided with a more selective surgical strategy and careful MDT-based patient selection.

Conclusions: Almost every second patient with Thy3f cytology and one in five with Thy3a cytology were diagnosed with thyroid cancer. Given the marked variation between centres, endocrine units should evaluate their local malignancy rates to better inform patient discussions and surgical decision-making.