

"High Risk" Features of Differentiated Thyroid Cancer Are Commonly Found in Autopsy Studies: Implications for the ATA Guidelines

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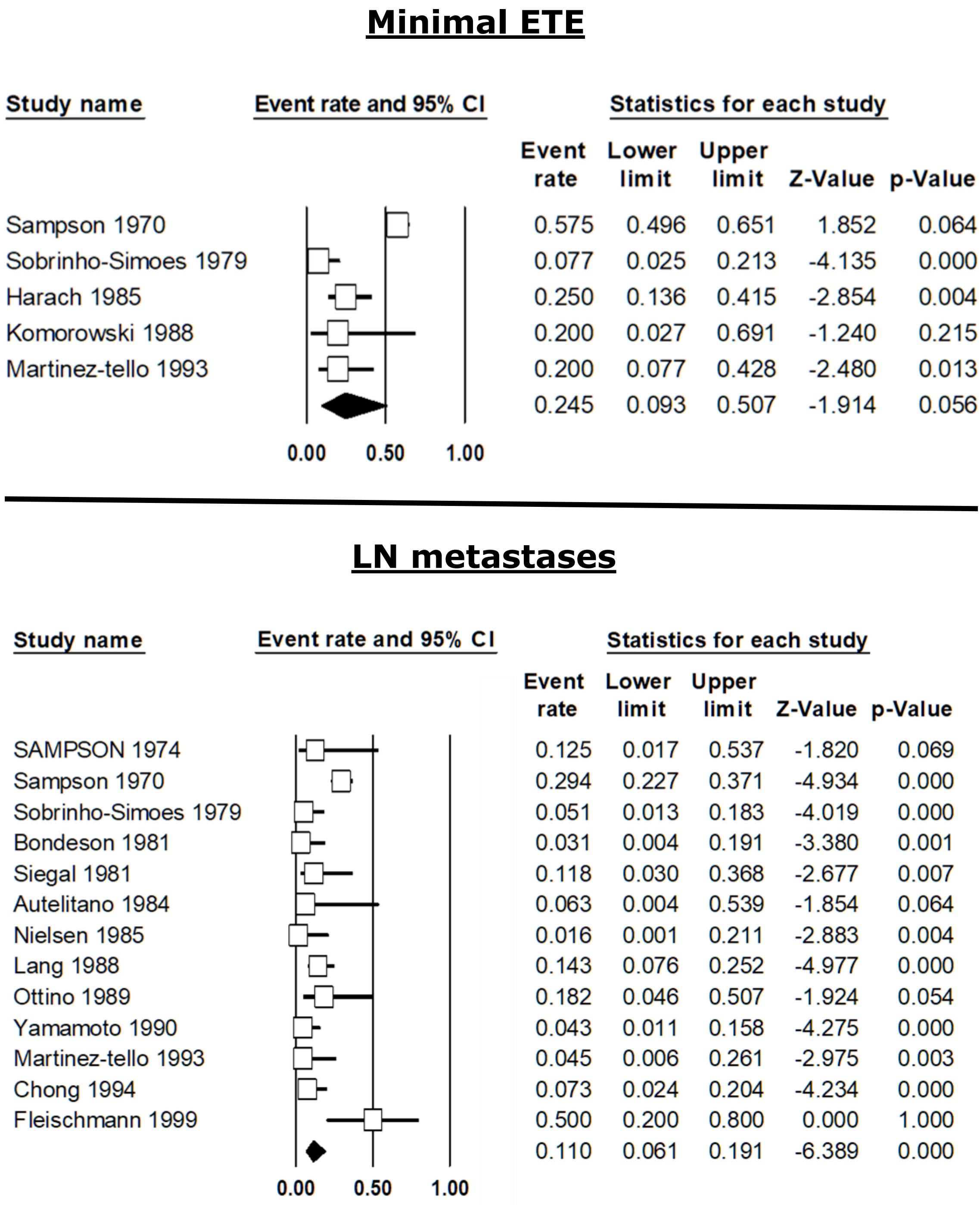
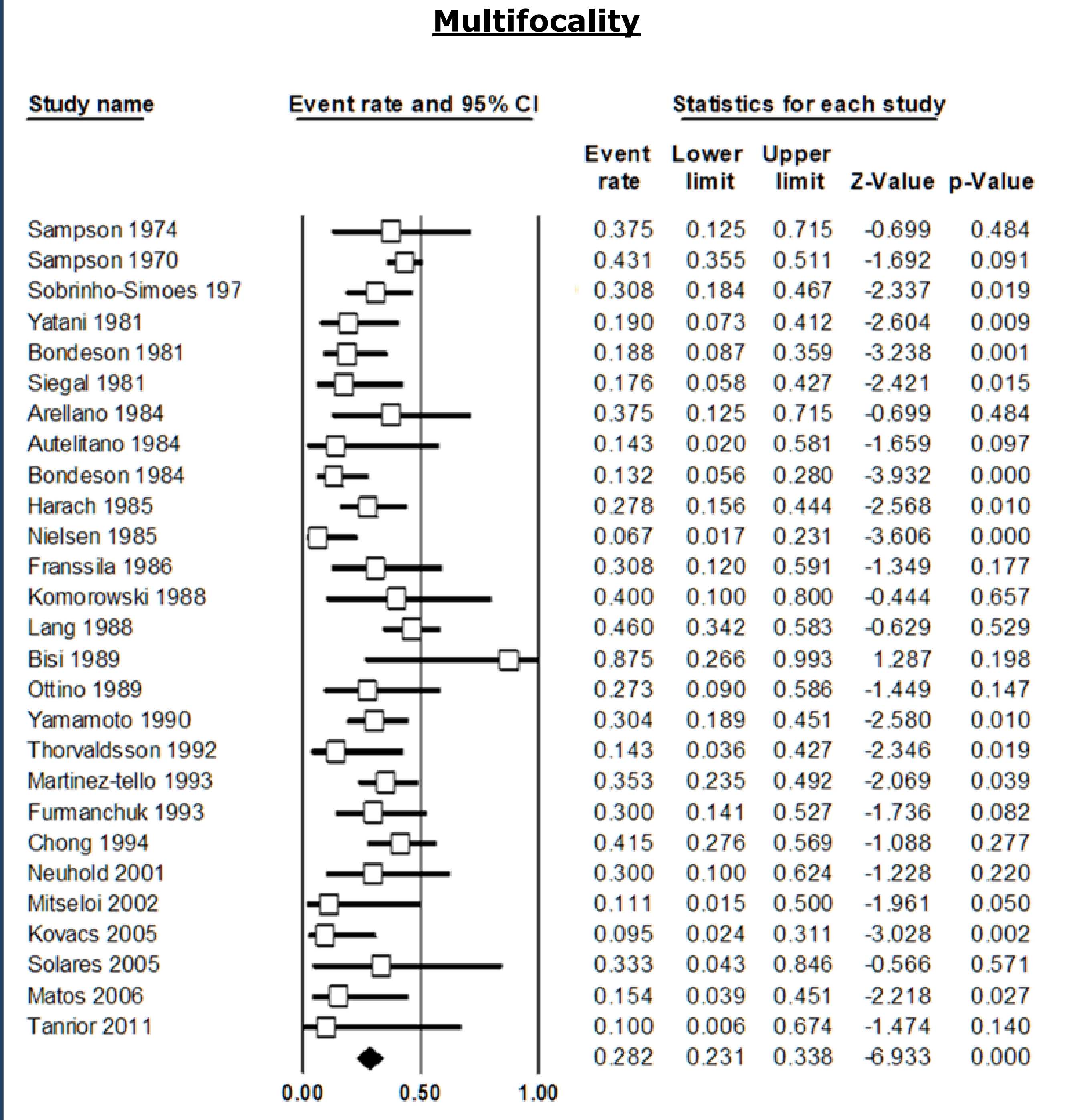
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RESULTS. Twenty-nine studies including 8,750 subjects fulfilled the inclusion criteria, with incidentally discovered DTC in 740 autopsies (prevalence of 8.5%). Age was reported in 17 studies, with a median age of 61 years (range 41-68 years). Multifocality was reported in 27 studies with a calculated event rate of 28.2% (95%CI 23.1% to 33.8%, random effect), with bilateral involvement in 18% (95%CI 12.6%-25/1%). Minimal ETE was reported in five studies, with an event rate of 24.5% (95%CI 9.3% to 50.7%, random effect). LN metastases was reported in 13 studies with an event rate of 11% (95%CI 6.1% to 19.1%, random effect). Vascular invasion was reported in seven studies with an event rate of 16% (95%CI 4% to 47%, random effect).

BACKGROUND. The popularity of lobectomy for differentiated thyroid cancer (DTC) has increased since the 2015 ATA guidelines. However, several recent studies reported that "high risk" histological features may be found in up to 50% of lobectomies, questioning the validity of this approach. In turn, the actual risk associated with some "high risk" features (multifocality, minimal extra-thyroidal extension (ETE), and small lymph node (LN) metastases) has been questioned in recent years. We aimed To assess the prevalence of "high risk" pathological features in occult DTC detected in autopsy studies.

METHODS. Meta-analysis of autopsy studies of the thyroid gland in subjects without history of thyroid cancer. Studies with DTC lesions and details on histological features were included.



CONCLUSIONS. "High risk" histological features are common in occult DTC found in autopsy studies, and do not seem to be markers of aggressive disease. These data support a less aggressive therapeutic approach in patients with microscopic "high risk" features which were not detected on pre-operative ultrasound.

