

Letters to the Editor

CORRESPONDENCE RE: BASOLO F, BALOCH ZW, BALDANZI A, MICCOLO P, LIVOLSI VA: USEFULNESS OF ULTRAFAST PAPANICOLAOU-STAINED SCRAPE PREPARATIONS IN INTRAOPERATIVE MANAGEMENT OF THYROID LESIONS. MOD PATHOL 1999;12:653-7.

To the Editor: Basolo *et al.* reported a 98% agreement between the cytologic evaluation of thyroid specimens submitted for intraoperative pathologic consultation and final diagnoses. This surely moves intraoperative cytologic evaluation well beyond “useful adjunct” to parity with the frozen section. Two recent cases illustrate our medical center’s similar positive experience with this technique.

Case 1

A 55-year-old Hispanic woman underwent right neck exploration 3 months after having had a right inferior parathyroid adenocarcinoma removed (Fig. 1). A postoperative Sestamibi scan demonstrated uptake in the inferior right thyroid lobe, and intra-thyroidal parathyroid neoplasm was suspected. At reexploration, severe adhesions distorted the neck anatomy. A 0.4-cm biopsy from the right inferior thyroid was submitted for intraoperative consultation. Frozen section demonstrated a pattern that architecturally resembled the parathyroid adenocarcinoma (Fig. 2) but with nuclear features that were difficult to evaluate. The differential diagnosis included parathyroid carcinoma and papillary thyroid carcinoma. Scrape cytology of the biopsy dem-

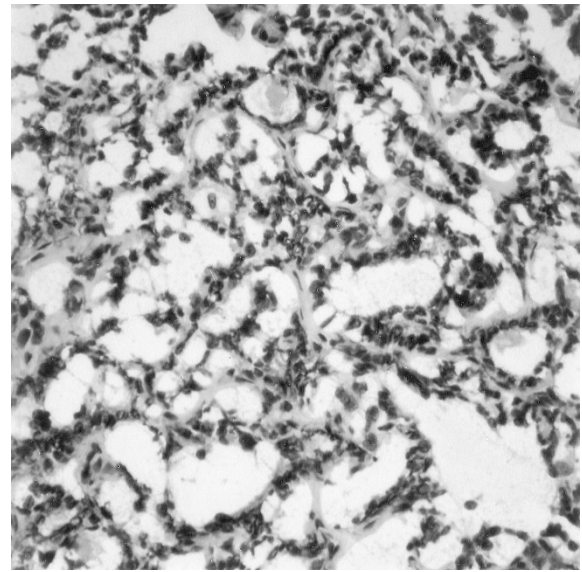


FIGURE 2. Thyroid frozen section with a pattern resembling parathyroid neoplasm.

onstrated nuclear grooves and chromatin clearing characteristic of papillary thyroid carcinoma (Fig. 3). A total thyroidectomy was performed. Two 0.3- and 1.4-cm foci of papillary carcinoma were identified in the right thyroid lobe. A 2.3-cm focus of

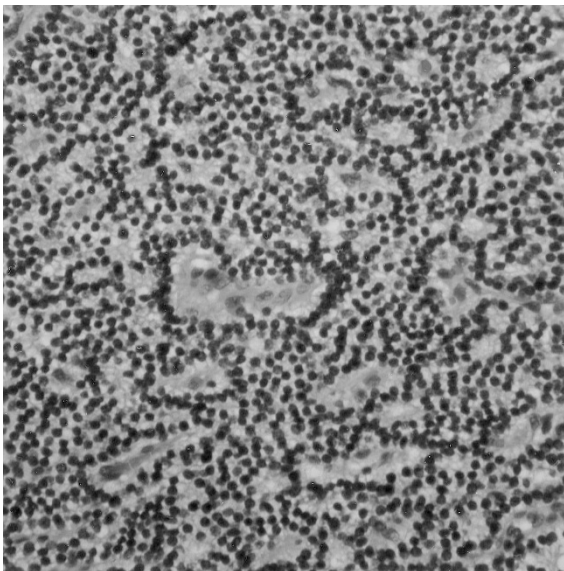


FIGURE 1. Parathyroid adenocarcinoma with a pseudofollicular pattern.

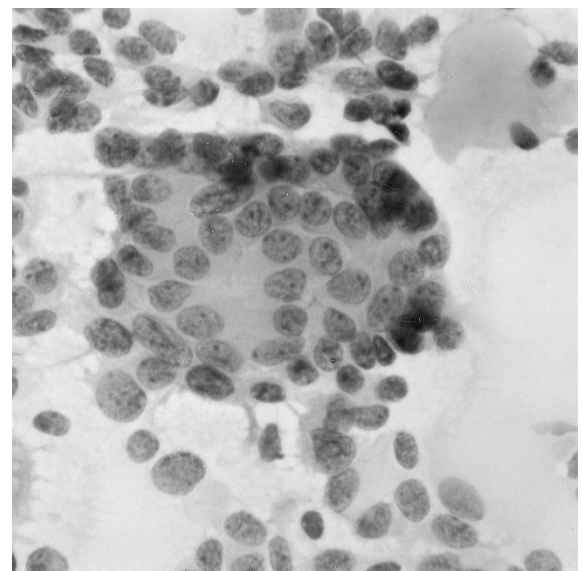


FIGURE 3. Thyroid scrape cytology demonstrating the characteristic nuclear features of papillary thyroid carcinoma.

papillary carcinoma was identified in the left lobe. There was no residual parathyroid carcinoma.

Case 2

A 47-year-old Caucasian man underwent a right thyroid lobectomy for a nodule diagnosed as “follicular neoplasm” by fine needle aspiration biopsy. The right lobe submitted for intraoperative consultation had a 3.5-cm sharply circumscribed firm tan nodule. Frozen section demonstrated a follicular neoplasm (Fig. 4). The differential diagnosis included follicular adenoma, adenomatous goiter, and follicular variant of papillary carcinoma. Scrape

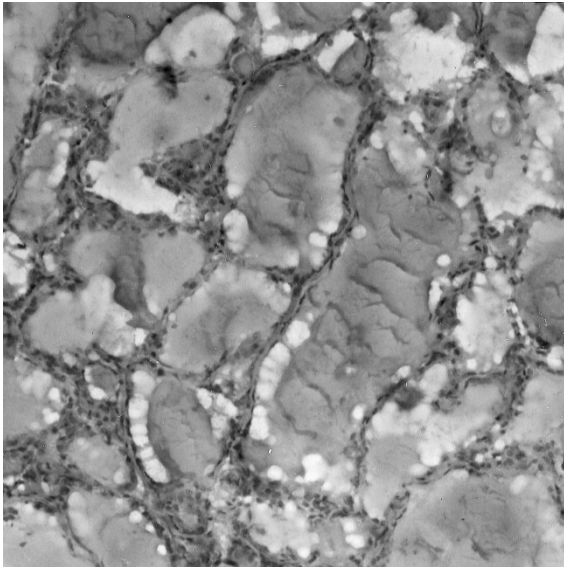


FIGURE 4. Frozen section of thyroid follicular lesion.

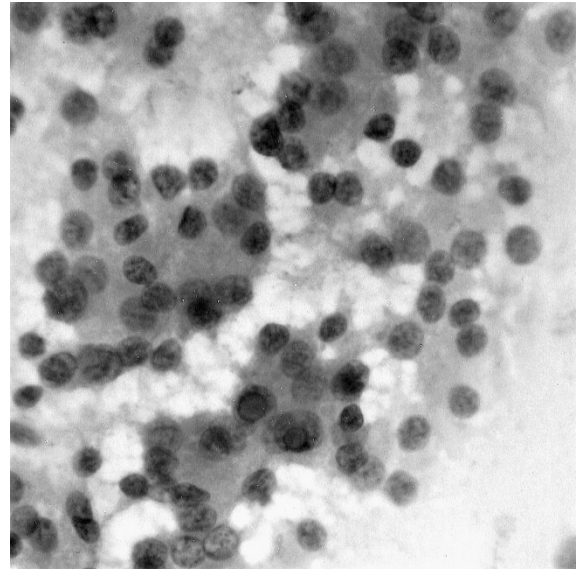


FIGURE 5. Thyroid scrape cytology demonstrating the characteristic nuclear features of papillary carcinoma.

cytology of the biopsy demonstrated chromatin clearing and intranuclear cytoplasmic inclusions characteristic of papillary thyroid carcinoma (Fig. 5). The subsequently removed left thyroid lobe demonstrated an additional 0.5-cm focus of papillary thyroid carcinoma.

Intraoperative cytology is of equal value to the frozen section and should be a standard part of the intraoperative management of thyroid lesions.

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