Management of Papillary Microcarcinoma: Primum Non Nocere?

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Increasing use of imaging procedures such as ultrasonography of the neck is identifying a large number of small thyroid nodules or "incidentalomas." The first decision point facing the clinician is whether to perform fine-needle aspiration cytology out of concern that many of these nodules will be found to be papillary thyroid microcarcinomas (PTMC). Guidelines of the American Thyroid Association (ATA) are clear on this point with recommendations that nodules larger than 1 cm should undergo fine-needle aspiration and that smaller nodules should be biopsied on the basis of finding suspicious ultrasonographic findings such as calcification, increased Doppler flow, solid or hypoechogenic appearance, irregular or blunted margins, intra-nodular vascularity on Doppler, or a taller than wide shape, and also if there is a history of radiation exposure or a family history of thyroid cancer (1). That a given nodule may be malignant can be signaled by uptake on an 18F-fluoro-deoxyglucose scan on positron emission tomography (2) and is based on the presence of an increased number of Glut transporters in cancer cells. One reason for the increasingly frequent detection of these incidental thyroid cancers is the growing use of positron emission tomography scans (3, 4).