

Washington University School of Medicine Digital Commons@Becker

Open Access Publications

2015

Misinterpretation of the American College of Radiology white paper on managing incidental thyroid nodules

Jenny K. Hoang
Duke University

Jill E. Langer
The Perelman School of Medicine

William D. Middleton
Washington University School of Medicine in St. Louis

Carol C. Wu
University of Texas M.D. Anderson Cancer Center

Lynnwood W. Hammers
Yale University

See next page for additional authors

Follow this and additional works at: http://digitalcommons.wustl.edu/open_access_pubs

Recommended Citation

Hoang, Jenny K.; Langer, Jill E.; Middleton, William D.; Wu, Carol C.; Hammers, Lynnwood W.; Cronan, John J.; Tessler, Franklin N.; Grant, Edward G.; and Berland, Lincoln L., "Misinterpretation of the American College of Radiology white paper on managing incidental thyroid nodules." *Thyroid*.25,5. 469-470. (2015).
http://digitalcommons.wustl.edu/open_access_pubs/3978

This Open Access Publication is brought to you for free and open access by Digital Commons@Becker. It has been accepted for inclusion in Open Access Publications by an authorized administrator of Digital Commons@Becker. For more information, please contact engeszer@wustl.edu.

Authors

Jenny K. Hoang, Jill E. Langer, William D. Middleton, Carol C. Wu, Lynnwood W. Hammers, John J. Cronan, Franklin N. Tessler, Edward G. Grant, and Lincoln L. Berland

Misinterpretation of the American College of Radiology White Paper on Managing Incidental Thyroid Nodules

Jenny K. Hoang,¹ Jill E. Langer,² William D. Middleton,³ Carol C. Wu,⁴ Lynnwood W. Hammers,⁵ John J. Cronan,⁶ Franklin N. Tessler,⁷ Edward G. Grant,⁸ and Lincoln L. Berland⁷;
American College of Radiology Incidental Thyroid Findings Committee

AS THE AUTHORS OF THE American College of Radiology (ACR)'s white paper on managing incidental thyroid nodules detected on imaging (1), we would like to comment on the recent article by Tufano *et al.* in *Thyroid* (2). We agree with the authors that the rising incidence of thyroid cancer is partly due to detection and workup of thyroid nodules seen incidentally on imaging, and that the majority of these subclinical malignancies are indolent in behavior. Tufano *et al.* advise against screening, but further state that it is “ethically distinct from not reporting incidentally detected thyroid nodules on diagnostic imaging when performed for other medical reasons, as suggested by a recent report of the ACR” (2).

Our first point is that that ACR white paper did not suggest that incidentally detected thyroid nodules should not be reported by the radiologist. The white paper states: “If the incidental thyroid nodule does not meet criteria for further evaluation according to the flowcharts, the Committee believes that determination of whether the incidental thyroid nodule is mentioned in the body of the radiology report should be left to the discretion of the radiologist.” We certainly did not mean that potentially important incidental findings should be withheld under any circumstance. In relatively healthy patients, we would expect radiologists to report small incidental thyroid nodules, but a substantial percentage of computed tomography (CT) and magnetic resonance (MRI) imaging studies are performed on patients with significant comorbidities, including terminal diseases, complex acute conditions, or advanced age. In this large population of patients, small incidental thyroid nodules have either no or almost no clinical importance. We are simply reaffirming radiologists’ rights to use their medical judgment in this context. Our goal is to add value to the referring physician’s approach to patient care. So, it is particularly unfortunate that the authors ascribe paternalistic motives to our work.

The goal of the ACR white paper was to provide evidence and consensus-based guidance to physicians about which incidental thyroid nodules meet criteria for further evaluation when detected on CT, MRI, nuclear medicine, and ultrasound studies. We are pleased that the authors of this commentary chose not to raise any objections to our actual recommendations (that radiologists need not recommend further evaluation for incidental thyroid nodules <1.0 cm in patients younger than 35 years of age, and <1.5 cm in patients 35 years or older). Given that the authors do not recommend screening with dedicated thyroid ultrasound for the reasons they cited, and considering that CT and MRI are worse at distinguishing benign from malignant nodules than ultrasound, we believe that not recommending dedicated thyroid ultrasound for small incidental thyroid nodules does not represent an “ethically distinct” difference.

The majority of physicians who will be receiving reports on patients with incidental thyroid nodules are not thyroid specialists and will not be well-informed about the probabilities, benefits, and risks of pursuing incidental thyroid nodules, which is information the radiologist can provide. We believe that there has been less attention to the risks than the benefits of pursuing incidental findings. Tufano *et al.* note that there is a “resultant increase in healthcare expenditures related to managing these presumably low-risk cancers without a clear patient benefit.” However, there is also a distinct risk of patient harm from adverse effects of unnecessary surgery and need for lifelong thyroid replacement therapy. Without specific advice regarding management, the default of the referrer could be to request an ultrasound on a higher proportion of thyroid nodules, too frequently leading to biopsy and further potential harm. Not providing guidance would be shirking our responsibilities

¹Department of Radiology, Duke University Medical Center, Durham, North Carolina.

²Department of Radiology, The Perelman School of Medicine at the University of Pennsylvania, Philadelphia, Pennsylvania.

³Department of Radiology, Washington University School of Medicine, St. Louis, Missouri.

⁴Department of Radiology, University of Texas MD Anderson Cancer Center, Houston, Texas.

⁵Department of Radiology, Hammers Healthcare Imaging, LLC, and Yale School of Medicine, New Haven, Connecticut.

⁶Department of Radiology, Brown University, Providence, Rhode Island.

⁷Department of Radiology, University of Alabama at Birmingham, Birmingham, Alabama.

⁸Department of Radiology, Keck School of Medicine, University of Southern California, Los Angeles, California.

as consulting physicians, given what is known about thyroid nodules and malignancy.

The ACR white paper on incidental thyroid nodules represents the sixth paper on incidental findings from the ACR (3). Other white papers have focused on incidental findings in abdominal and pelvic organs. Recommendations from these prior papers have helped to standardize reporting and reduce unnecessary workup (4).

All of these papers contain flow charts that help the radiologist determine which incidental lesions require further workup and should be mentioned in the impression of the radiology report. Just as we do not recommend workup for all renal cysts or liver lesions, we do not recommend workup for every incidental thyroid nodule.

In summary, the ACR white paper provides a practical and medically appropriate approach to managing incidental thyroid nodules detected on imaging studies. The recommendations help to identify patients who should receive further workup with ultrasound, and should not be misinterpreted as guidelines to withhold information from the patient and clinician.

Author Disclosure Statement

No competing financial interests exist.

References

1. Hoang JK, Langer JE, Middleton WD, Wu CC, Hammers LW, Cronan JJ, Tessler FN, Grant EG, Berland LL 2015 Managing incidental thyroid nodules detected on imaging: white paper of the ACR Incidental Thyroid Findings Committee. *J Am Coll Radiol* **12**:143–150.
2. Tufano R, Noureldine SI, Angelos P 2015 Ethical responsibilities of caring for patients with incidental thyroid nodules. *Thyroid* **25**:467–468.
3. Berland LL 2013 Overview of white papers of the ACR incidental findings committee ii on adnexal, vascular, splenic, nodal, gallbladder, and biliary findings. *J Am Coll Radiol* **10**:672–674.
4. Hui JS, Kramer DJ, Blackmore CC, Hashimoto BE, Coy DL 2014 A quality improvement initiative to reduce unnecessary follow-up imaging for adnexal lesions. *J Am Coll Radiol* **11**:373–377.

Address correspondence to:

Jenny K. Hoang, MBBS

Department of Radiology

Duke University

Box 3808

Durham, NC 27710

E-mail: jennykh@gmail.com