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## I've got a what?

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There are hosts of new problems that have arisen in our modern imaging era of submillimeter CT, “screening MR,” and “screening CT---” problems we never would have dreamed of in the previous era of very selective utilization and much-lower-resolution imaging. Feeding into this developing storm are medico-legal-obsessed physicians (as well as the occasional disease-obsessed patient). This “perfect storm” of imaging performed with minimal or no indications and increasingly higher resolution, further reinforced by the attention increasingly paid to incidentalomas (those pesky findings outside the scope of the exam) has given rise to a relatively new phenomenon of ever-growing significance: Overdiagnosis. That was a word I don't seem to remember hearing much in medical school (and I slept very little), but now I hear it on a routine basis. It seems we are awash in overdiagnosis. And we are to blame. Maybe we can be a part of the cure.

Overdiagnosis has come to our attention through both the medical and the lay press. A recent *New York Times* article<sup>1</sup> raised the specter of overdiagnosis in the rise of the reported incidence of thyroid cancer in the

U.S. and world-wide, citing a recent publication<sup>2</sup> from South Korea regarding overdiagnosis and potential overtreatment of patients with minimal thyroid cancer, a disease that, as we know, is often one that plays out in slow motion. This was heralded by opinion pieces, analysis and commentary, and multiple print versions in all the major newspapers. It's big stuff.

But thyroid cancer isn't the only disease we may be overdiagnosing. Oh, no, far from it. Breast cancer has also been associated with overdiagnosis and overtreatment. A recent article<sup>3</sup> reported widely by the lay press (including the *Washington Post*, *The New York Times* and many others) detailed overdiagnosis of minimal breast cancer. Lots of other cancers are also seemingly seen far too often. Prostate and lung cancer also have been reported as being overdiagnosed. And this isn't just a cancer phenomenon. A recent report called physicians to task for the frequent diagnoses of “minimal” cerebral aneurysms. This article<sup>4</sup> reinforced what we know of these very small “vascular protrusions” seen on MRA or CTA studies (often performed for unrelated purposes) and discussed in some editorial detail the collateral

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damage done by these findings—namely with regard to our patients’ peace of mind. In all of these “conditions,” otherwise healthy people now have a disease that they view as potentially fatal. They now have a diagnosis. They likely watch their insurance rates climb. They may seek and obtain unnecessary and potentially harmful therapy for a “disease” that may have never presented a problem to them.

As radiologists, we are often at the vanguard of this overdiagnosis phenomenon. We make those calls, we suggest other studies, and occasionally we begin the wild goose chase to assign a name and diagnosis to some subtle finding. Our job as diagnosticians is certainly a balancing act. We know we are there to read those films and make those calls. No one likes to have someone (and certainly not a plaintiff’s attorney) point out a missed anything – regardless of how small or potentially insignificant. So, how best to not add to this brewing maelstrom?

The simplest approach at the current time is to educate yourself on the recommendations for all screening examinations—the “screening rules of the road.” Just one example: The American College of Radiology white paper on thyroid nodules<sup>5</sup> is a very good starting point for those of you who may find yourself facing incidental or undiagnosed thyroid lesions. Familiarize yourself with the suggested terminology to label findings, and promote homogeneity in your practice. Work closely with your clinicians. The scope of this problem

is daunting. Unfortunately, much of what we find ourselves faced with is an entirely new phenomenon. In the era of 5 mm or even 10 mm head CTs we didn’t see much white matter disease. What do you do with those few small white matter “spots and dots” in an otherwise healthy and normal younger patient? Are you calling those MS or, God forbid, saying you “can’t exclude” something heinous? How about this for a line in a report: “This finding is of uncertain etiology but doubtful significance and no further evaluation is necessary”?

The literature needs to catch up quickly with the significance of many of these findings. That might require years of observation to make reasonable and appropriate statements. Hopefully many such studies are already in process.

As imaging studies improve, it turns out that few of us are entirely “normal,” although I can assure you, most of us are completely “within normal limits.”

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