Incidental Findings (IFs)

Abnormalities on medical tests that weren't what doctors were looking for—and probably mean nothing—can cause a lot of anxiety and incur costs in time and money. And at times much worse!

As it turns out, incidental findings are hardly incidental; they turn up in about 1/3 of all CT scans.

Incidental Findings (IFs) are of escalating concern in two areas:

1. Biomedical research is critical to the advancement of medicine, and the unsung heroes are the legions of volunteers.
   - But these countless lab tests, CT scans, and MRIs done for specific research questions are as prone to incidental findings as tests done in the clinical world and pose unique ethical dilemmas.
   - What happens when an incidental finding is noted? Are researchers responsible for obtaining medical care for the volunteer? Are they financially responsible for such care? Can there be any malpractice implications, especially for researchers who are also MDs?
The development that has brought these ethical controversies to the forefront is the advent of low-cost whole-genome sequencing. Just send a bit of saliva and $99—shipping and handling included—and you, too, can have the entire contents of your DNA laid out like a take-out menu.

What should be done if a direct-to-consumer genome test discovers a gene for a serious, heritable illness? Does the company have an ethical obligation to make a referral for treatment? To inform family members who might also be at risk? What happens if the results show a chromosomal sex that is different than the person’s known sex? What happens if testing reveals parental lineage that isn’t what was expected? And what happens if the tests are wrong?

**2. Direct-to-Consumer (DTC) medical testing.**

**AORTA IFs**

Tiny asymptomatic ulcers
Small aneurysms and dilations
Small ductus remnants
Asymptomatic chronic dissection
And many more...

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Cited recent example of a Radiology Chairman who had a CT colonography that uncovered a renal lesion, hepatic mass, and multiple lung nodules; this led to a $50,000 work-up, and major thoracic lung surgery followed by prolonged recovery

We must reduce the # of CTs being ordered and have a good reason to order one!
- Need guidelines!
- Must apply the ALARA Principle (“as low as reasonably achievable”); evidence shows CT radiation doses could be reduced by 50% without affecting diagnostic accuracy
- Must inform patients of CT risks before ordering, including IFs
- Physicians should monitor cumulative individual CT radiation exposure over time and provide this information accordingly

WHAT CAN WE DO?

Two IF facts seem to hold true regardless of the organ system in which they are found or the discipline studying them:

1. the vast majority are benign, and
2. as the use of imaging continues to climb, they are being encountered at an increasing rate.

“We are more frequently being presented with non-emergent distracters that, more often than not, represent risk instead of benefit to the patient”

“Why is there so much overuse?”

Here are the Main Reasons:

- Financial incentives
- Fear of lawsuits
- Uninformed physicians
- Patient demand
- Lack of regulation

The best way to prevent IF debacles is through avoidance of unnecessary scans and testing in the first place!
WHAT YOU (consumer) CAN DO

• Ask why the test is necessary
• Check credentials
• Ask for the lowest effective dose
• Avoid unnecessary repeat scans

GET A SECOND OPINION if...

• Your doctor (or group) owns a CT scanner or has a financial interest in an Imaging Center
• Your doctor recommends a "whole-body" CT scan
• Your dentist recommends a 3D dental shot (cone-beam CT)

THANK YOU!

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