

Overtesting: A Sign of Defective Medicine



To the Editor:

I read the article by Owlia et al¹ published in the May 2014 issue of *The American Journal of Medicine* with a keen interest. The authors retrospectively analyzed the data on head computed tomography (CT) scans on patients with at least 7 admissions a year. More specifically, the researchers investigated what were the reasons for ordering head CT scan and whether the findings necessitated an immediate change in the patient management. Interestingly enough, only 7 of 795 head CT scans demonstrated a serious finding requiring change in management. Furthermore, it is important to keep in mind that data of this study originate from an academic institution with a sicker population than that seen in a community setting. The study authors presumed that in a community hospital setting, the number of abnormal head CT scans might be much lower.

In the accompanying commentary, Greenberg and Green² mentioned some of the possible reasons for overtesting, such as defensive medicine, suboptimal knowledge, profit, patients' expectations, and a wrong belief that ordering more tests is beneficial for patients. Indeed, patients' expectations, beliefs, and understanding on how medicine should be and their health managed, pose some pressure on clinicians on a routine basis. Some of the clinicians find that satisfying patients' expectations is much easier than trying to explain the indications for a particular test or treatment. Interestingly enough, a study by Fenton et al³ showed that patients who have higher satisfaction rates at the same time have greater inpatient admission, higher

total care expenditure, and surprisingly, higher mortality.³ Furthermore, it is important to note that the study by Owlia et al¹ covered only a small portion of aggressively overused tests. For example, in perioperative medicine, we see overuse of cardiac stress testing,⁴ chest radiographs, and laboratory testing. Due to space limitations, it is impossible to include all the tests and their respected scientific references, which are overzealously abused in our country. With the presence and availability of all the laboratory and imaging testing, physicians tend to rely less on clinical judgment and the medicine becomes a knee-jerk reflex rather than a true scientific art.

So what can be done to address the problem? Better communication in the form of patient history, as well as communication with the family members and other health care personnel involved in the care of patients to gather more clinical information, is essential. Critical analysis of the indications, contraindications, and diagnostic yield of the test has to be a part of every patient case management. We as physicians should keep in mind that our resources are not limitless, and therefore, we have to use them wisely.

Aibek E. Mirrakhimov, MD
Department of Internal Medicine
Saint Joseph Hospital
Chicago, Ill.

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References

1. Owlia M, Yu L, Deible C, Hughes MA, Jovin F, Bump GM. Head CT scan overuse in frequently admitted medical patients. *Am J Med.* 2014;127:406-410.
2. Greenberg J, Green JB. Over-testing: why more is not better. *Am J Med.* 2014;127:362-363.
3. Fenton JJ, Jerant AF, Bertakis KD, Franks P. The cost of satisfaction: a national study of patient satisfaction, health care utilization, expenditures, and mortality. *Arch Intern Med.* 2012;172:405-411.
4. Sheffield KM, McAdams PS, Benarroch-Gampel J, et al. Overuse of preoperative cardiac stress testing in Medicare patients undergoing elective noncardiac surgery. *Ann Surg.* 2013;257:73-80.

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