

# Virtual Mentor

American Medical Association Journal of Ethics  
January 2011, Volume 13, Number 1: 16-20.

## CLINICAL CASE

### **Responding to Patient Requests for Nonindicated Care**

Commentary by John Cardasis, MD, and David R. Brush, MD

When Dr. Wainwright entered the room late on a Friday afternoon, the last new patient of his weekly thoracic surgery clinic awaited him anxiously. Mrs. Kitson sat rigidly upright on the edge of the exam table, wringing her hands, as he pulled up the stool.

“Hello, Doctor. We’ve never met before, but I just wanted you to know that I’ve heard wonderful things about you. You performed surgery on my best friend just a few months ago as a matter of fact,” Mrs. Kitson blurted out, giving her friend’s full name.

“Pleasure to meet you, Mrs. Kitson. I remember Mrs. Martin well,” Dr. Wainwright replied. And he did remember Mrs. Martin. She was one of the most difficult lung cancer resections he had done in a long time. An unfortunate story, Mrs. Martin had been diagnosed 4 months before with locally advanced lung cancer, and removing all the cancer proved impossible for Dr. Wainwright and his colleagues.” I haven’t seen her for a couple of months,” he said. “I hope she’s doing well.”

“Very well,” Mrs. Kitson said, rubbing her palms against her thighs.

“Well, what brings you in today?”

Without hesitation, Mrs. Kitson said: “I’d like a CAT scan. As soon as possible. I know my situation isn’t exactly the same as my friend’s, but I just have to know if I have lung cancer. I can’t go through what she went through.”

Over the next few minutes, Dr. Wainwright attempted to understand the reason for Mrs. Kitson’s anxiety. It turned out that she had smoked a pack of cigarettes a day for 5 years a couple of decades earlier. However, she did not have any of the symptoms Dr. Wainwright asked about, such as cough, hemoptysis, or weight loss, and knew of nobody in her family who had had lung cancer. Dr. Wainwright explained to Mrs. Kitson that since she was asymptomatic, there was no evidence that screening for lung cancer would do her any good. In fact, the current position of the U.S. Preventive Services Task Force was: “the evidence is insufficient to recommend for or against screening asymptomatic persons for lung cancer with either low-dose computerized tomography, chest x-ray, sputum cytology, or a combination of these tests.” Furthermore, there was the cost to consider, as well as

the risks of high-dose radiation exposure and the possibility of invasive work-ups of otherwise benign lesions.

“I know it probably sounds silly to you,” Mrs. Kitson said, “but I have to be sure.”

Although she clearly had no clinical indication for a CT scan, Dr. Wainwright wondered to what extent Mrs. Kitson’s “whole” health, her well-being, might depend on getting the scan. But, then, couldn’t that same reasoning be used for everyone who wanted an unnecessary scan?

### **Commentary**

Patients request testing or treatments that are not supported by guidelines, are not medically indicated, and may even be potentially harmful. Such requests may be based on misinformation, misunderstanding, anxiety, or even hypochondriasis. As access to medical information continues to increase, patients will approach physicians with a greater, though often incomplete, knowledge of potential diagnoses and treatments and will make more specific requests. How should physicians approach these requests in a manner that provides good care for patients, avoids nonindicated care that could be harmful, and maintains a good working relationship with the patient?

Mrs. Kitson is worried that she has lung cancer and believes a CT scan will reassure her. She is focused on the potential benefit of her request, but may not be aware of the potential risks. There is currently no evidence that performing a screening chest CT in an asymptomatic patient with a 5-year, pack-a-day smoking history would be of significant benefit. Given the low lung cancer incidence in patients like Mrs. Kitson [1], the small chance of discovering a lung cancer with CT screening is offset by the greater likelihood that the scan would either be normal or reveal an abnormality that would require further evaluation.

Pulmonary nodules are one of the most common abnormalities discovered with CT scanning. The majority of these nodules are small and benign, but confirming that often requires additional CT scans at intervals for a period sometimes stretching up to 2 years. So, while a CT scan could be normal and reassuring for Mrs. Kitson, there is a substantial risk that she could have to spend as long as 2 years fearing that the nodule found on scan was cancerous, probably undergoing an invasive biopsy in the meantime to ensure the abnormality was benign. Such false positive screening CTs cause great psychological distress and lead to invasive procedures that would not otherwise have been performed.

Even if Mrs. Kitson undergoes the screening CT, and the result is normal, she may still have been harmed. A typical chest CT exposes a patient to 8 millisieverts (mSv) of radiation. These doses can quickly add up as patients are repeatedly exposed to CT scanning, whether for follow-up of a diagnosis, redundancy with visits to different hospitals, or, as with this patient, as a salve for anxiety.

As medical imaging becomes more ubiquitous and more powerful, the long-term consequences of medical ionizing radiation exposure is being examined more closely. While there have been no prospective studies on the cancer risks of CT scans, there have been studies of individuals exposed to equivalent amounts of radiation and their incidence of malignancy. Studies of nuclear power plant workers, individuals exposed to residual radiation from nuclear fallout, and radiologists before protective equipment was used [2-5] have shown an increasing incidence of cancer in individuals who had radiation exposure from 10 to 100 mSv, with some linking a increased cancer risk to doses as low as 5 mSv.

Two recent studies in the *Archives of Internal Medicine* [6, 7] estimated the risk of cancer in a patient population exposed to varying levels of radiation from CT imaging. Extrapolating cancer data from the aforementioned population studies, the first study estimated that the risk for a 40-year-old woman undergoing a chest CT for developing a radiation-related malignancy was 1 in 720. If she were 20 years old, the risk increased to 1 in 390. The second study estimated that approximately 30,000 future cancers would be caused by the diagnostic radiation exposure in the year 2007, comprising 1.5 to 2 percent of cancer incidence. So even a “normal” reassuring CT scan is not without inherent, albeit delayed, risk.

The job of a physician is not only to diagnose illness and perform procedures but to also determine whether the diagnostic test or treatment is warranted in the first place. Physicians are not obligated to offer testing or treatments that are not medically indicated—even if patients demand them [8]. Often physicians must determine what is medically indicated by weighing the risks and benefits associated with fulfilling the patient’s request. In the case of Mrs. Kitson’s request, a CT scan to screen for lung cancer is not medically indicated. No studies of patients like her have shown a benefit [9], and there are both the considerable false-positive risk and the risk associated with ionizing radiation to consider. While Mrs. Kitson might benefit psychologically from a normal test, she could suffer greater distress from a false-positive result. Without a substantial medical benefit and with numerous potential risks, we would not proceed with CT scanning.

How should the physician proceed if, after a discussion of the risks and benefits, Mrs. Kitson still pleads to be tested? Is a physician who refuses to comply with her request restricting her autonomy? Respect for autonomy is usually referenced when patients exercise their negative rights, such as the right to refuse a test or intervention. Positive rights—the rights to demand something be done—are more circumscribed in medicine [10]. Medicine is rife with examples in which a patient’s ability to obtain specific testing or treatments is limited. Many medications and services cannot be obtained by patients without a physician’s approval, not to mention insurance coverage. If patients’ autonomy were absolute, then a competent patient’s demands for testing or treatment would always have to be honored. Such a system would contradict the physician’s obligation to protect the patient from unacceptable harm and unnecessary risk. Doing harm to a patient in the service of his

or her autonomy fails to fulfill the physician's professional duty and compromises the principles of sound medical care.

This does not mean, however, that a physician should be dismissive of the patient's concerns. As advocates for the patient, physicians need to discern why requests are being made. What initially may seem to be an idiosyncratic idea, such as an elderly patient's request for syphilis testing because it was a recent diagnosis on *House*, may turn out to stem from a real risk—for example, the patient has been sexually active with a new partner, but did not wish to disclose her new status to her physician.

Even if requests are investigated and no medical indication is discovered, understanding why the patient is making the request will help the physician care for the patient. Topic-specific education that clarifies misunderstandings and incorrect information may resolve the conflict. The physician who intends to decline the patient's request should take care to explain the reasoning behind the decision. Otherwise, the patient may well suspect that the doctor is merely ignoring his or her concerns or acting in the interest of cost containment, rather than his or her best interest.

In this case, Mrs. Kitson's fear that she may suffer the same fate as her friend may be the driving force behind her request. A careful discussion of her goals and education about the risks and benefits associated with her requests are essential. Dr. Wainwright should decline to proceed with CT scanning, but should be sure to explain why.

Mrs. Kitson may be satisfied and reassured by the encounter and may continue the patient-physician relationship, or, her concerns unallayed, she may seek another physician's opinion. Alternatively, she may pursue the scan through a commercial vendor, which is within her rights. But as long as patients make requests of the physician within the parameters of the patient-physician relationship, physicians should evaluate those requests and apply their knowledge and expertise to give only those services that are medically indicated.

## References

1. Peto R, Darby S, Deo H, et al. Smoking, smoking cessation and lung cancer in the UK since 1950: combination of national statistics with two case-control studies. *BMJ*. 2000;321(7257):323-329.
2. Brenner DJ, Doll R, Goodhead DT, et al. Cancer risks attributable to low doses of ionizing radiation: assessing what we really know. *Proc Natl Acad Sci USA*. 2003;100(24):13761-13766.
3. Richardson D, Sugiyama H, Nishi N, et al. Ionizing radiation and leukemia mortality among Japanese atomic bomb survivors, 1950-2000. *Radiat Res*. 2009;172(3):368-382.
4. Cardis E, Vrijheid M, Blettner M, et al. Risk of cancer after low doses of ionising radiation: retrospective cohort study in 15 countries. *BMJ*. 2005;331(7508):77.

5. Yoshinaga S, Mabuchi K, Sigurdson AJ, Doody MM, Ron E. Cancer risks among radiologists and radiologic technologists: review of epidemiologic studies. *Radiology*. 2004;233(2):313-321.
6. Smith-Bindman R, Lipson J, Marcus R, et al. Radiation dose associated with common computed tomography examinations and the associated lifetime attributable risk of cancer. *Arch Intern Med*. 2009;169(22):2078-2086.
7. Berrington de Gonzalez A, Mahesh M, Kim P, et al. Projected cancer risks from computed tomographic scans performed in the United States in 2007. *Arch Intern Med*. 2009;169(22):2071-2077.
8. Jonsen AR, Siegler M, Winslade WJ. *Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine*. 5th ed. New York: McGraw-Hill Professional; 2002.
9. US Preventive Services Task Force. Lung cancer screening: recommendation statement. *Ann Intern Med*. 2004;140(9):738-739.
10. Brett AS, McCullough LB. When patients request specific interventions: defining the limits of the physician's obligation. *N Engl J Med*. 1986; 315(21):1347-1351.

John Cardasis, MD, is a fellow in the Section of Pulmonary and Critical Care Medicine at the University of Chicago Medical Center.

David R. Brush, MD, is a fellow in the Section of Pulmonary and Critical Care Medicine and the MacLean Center for Clinical Medical Ethics at the University of Chicago.

### **Disclosure**

Dr. Brush is supported by the National Heart, Lung and Blood Institute (T32 HL07605). The funding source had no role in the preparation, review, or approval of this manuscript for publication.

### **Related in VM**

[Health Effects of Smoking and the Benefits of Quitting](#), January 2011

[The Debate over Prostate Cancer Screening Guidelines](#), January 2011

[Evidence-Based Medicine and Clinical Expertise](#), February 2006

*The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental.*

*The viewpoints expressed on this site are those of the authors and do not necessarily reflect the views and policies of the AMA.*

Copyright 2011 American Medical Association. All rights reserved.