

## **Locked In**

*Dr. Paul Griner, Professor Emeritus of Medicine at the University of Rochester, presents the third in a series of case studies for the IHI Open School.*

In *How Doctors Think*, author Dr. Jerome Groopman reflects on the reasoning process that doctors use to arrive at a diagnosis. He refers to the problem of physicians becoming “locked in” to a diagnosis so early in the process that they overlook the important clues. The result, very often, is an incorrect diagnosis and inappropriate treatment.

The best example I can recall involved my twin brother, John.

He had developed a chronic pain in his right hip and was referred to an orthopedic surgeon for advice. The surgeon obtained a CT scan of the hip. It showed some activity at the head of the femur, suggesting the possibility of a cancerous growth. My brother called me from San Francisco (he was on a business trip) and I advised him to arrange a visit with an oncologist at the university hospital located in his hometown. I flew up to be with him during a day of consultations and examinations.

The oncologist, with knowledge of a possible malignancy involving the head of the femur, ordered a new CT scan of the hip. It showed evidence of increased blood flow, furthering the conclusion that there was a tumor. At that time, I asked whether the pain could be due to aseptic necrosis (bone death caused by poor blood supply) of the hip. The response: “Oh no, the nuclear scan would not light up like this. It would be just the opposite.”

A chest x-ray was obtained as part of the workup for presumed metastatic carcinoma. The radiologist noted numerous tiny densities throughout both lungs. Equipped with the referral note from the oncologist and the interpretation of the CT scan, he said to me, “This has to be metastatic carcinoma.”

Late in the afternoon, the oncologist informed John that all findings indicated a cancer that had traveled to his bone and lung. (The three main cancers in men that metastasize to both bone and lung are prostate, lung, and lymphoma.) A biopsy of the hip lesion was arranged, and we returned home where John sat down with his family and shared what the doctors had said. He told everyone that he had enjoyed a good life and was ready to die. Many tears were shed.

But John looked very healthy for a man with a tumor that had metastasized to his lungs and bone. Except for his hip pain, he felt well. Sure enough, when the biopsy was done, there was no cancer found. Evidence of aseptic necrosis was found, however, which was healing spontaneously. This explained the findings on the CT scan. Again, there was much cheering and more tears among the family members—this time, though, it was tears of joy and relief.

(The report of a chest x-ray taken some years earlier in another city was tracked down and found to be identical with that of the current chest x-ray—findings thought to be scarring from old granulomas, small areas of inflammation due to tissue injury.)

Within a matter of weeks, John’s hip pain disappeared.

### **Discussion Questions**

1. What information did the oncologist likely have available which, on further reflection, might have prevented him from reaching a premature conclusion that the patient had metastatic cancer?
2. Pretend that you are the oncologist. What would you have done first after receiving the information about the possibility of the cancerous growth?
3. As the oncologist, how would you follow-up with the patient after learning that there was no cancer found? Would you acknowledge the error of a premature diagnosis of cancer? Why or why not?
4. Have you ever seen a similar example of a hasty, incorrect diagnosis? What happened? What was the result?
5. Did Dr. Griner himself contribute to a premature diagnosis by arranging an appointment with an oncologist in lieu of a visit with the patient's personal physician—a person who knew his medical history?
6. This case is an illustration of poor patient-centered care, as John, the patient, was not consulted much during the process. Think of a recent experience you've seen when the patient wasn't at the center of his or her care. What happened? How could the situation have been improved?

***Commentary from Dr. Griner:** This is a powerful example of how physicians can become blinded to evidence after having prematurely locked themselves into a diagnosis. We never asked John when and where his last chest x-ray had been taken, which clearly we should have done during the visit with the oncologist. We also never raised the question of whether someone who looked and felt so well might have something other than metastatic carcinoma. A lot of heartache, tears, and stress for both John and his family might have been avoided if more attention had been paid to these important details.*

Further reading:

Groopman, J. *How Doctors Think*. Boston, MA: Houghton Mifflin Company; 2007.

Editor's Note: The full collection of Dr. Griner's case studies, *The Power of Patient Stories: Learning Moments in Medicine*, will be published through Amazon's electronic book publishing program toward the end of 2012.