“But I read on the Internet”
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*Story from the Front Lines*

Refreshed after a cup of coffee, I knocked on the door. Mrs. X was my first patient of the day.

Mrs. X was a healthy 37 year old lady who had moved to Colorado with her husband over a decade ago. They owned a pet business together, and they had two children, both in middle school. Needless to say, Mrs. X was busy, and she had a lot to live for.

Our visit focused on headaches she was having. She told me she had migraines many years ago but those had resolved. Recently, she noticed that late in the day she had a squeezing pain on both sides of her eyes. When she got the pain, she felt like she needed to massage her temples, or simply close her eyes. Her vision was intact, she had no other neurologic symptoms, and her exam was unremarkable.

“This sounds like what’s called a tension headache,” I told her, explaining that it can be triggered by stress and often treated with over the counter medications.

“Well,” she said, pulling some papers out of a crowded purse. “But I read on the Internet – WebMD – that a headache can be a symptom of a brain tumor. Shouldn’t we get an MRI?”

*Teachable Moment*

Physicians have technological resources readily accessible at their fingertips – UpToDate, MedScape, Epocrates, and the like, all of which can be used for real-time clinical decision support. It has even been demonstrated that hospitals using UpToDate boast shorter patient lengths of stay and lower mortality rates compared to hospitals without the online information resource1.

Patients, of course, have information readily accessible at their fingertips, too – perhaps not with the subscriptions for UpToDate but with free resources like WebMD, or even Wikipedia. The prevalence of use of sites like WebMD may be particularly high in younger people. In a 2010 Student Health Survey at the University of Pennsylvania, 60 percent of the student body admitted to using the site regularly.2

As physicians, we encourage health literacy, but what is the balance between the benefits of a patient’s motivation for personal health awareness and the risks of the same patient not being able to interpret the information as a physician might?
The potential harm in this vignette encompasses not just the costs (financial and otherwise) of an unnecessary MRI, but also includes less tangible costs. For example, could the relationship with the patient be damaged by not ordering an MRI, perhaps driving them to another physician? Could there be legal ramifications for not ordering an MRI in this case?

The financial burden posed by an MRI can be up to several thousand dollars for an uninsured patient. And although there are no harmful side-effects associated with the magnetic field in the scanner (assuming no pacemaker or implanted metal), an MRI can lead to incidental findings, most commonly pituitary adenomas, which are often found in asymptomatic patients and may be present in about 78 out of every 100,000 people. Incidental findings, of course, may lead to a cascade of unnecessary interventions.

In this case, managing the patient’s concern respectfully may not involve citing specific financial costs of the MRI. After all, for patients like Mrs. X, with a successful business and two children, the knowledge of not having a brain tumor may be important. Instead, doing no harm may mean discussing the resources that she and other patients use online.

It is useful to keep in mind that there are many resources available, some more practical than others. In this case, available data and recommendations argue against evaluation of this headache with an MRI. Discussing the material found on the internet openly with the patient – i.e. expanding the dialogue – is likely a useful technique in these situations, understanding that while there are many benefits to these websites, there can be some associated harms as well.

References

4. Goadsby PJ. To scan or not to scan in headache. BMJ 2004; 329:469.