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FROM THE DESK OF THE PRESIDENT

What Happened to the History and Physical?

Lay your hands on the sick and they shall be healed.
The Bible

I love new technology. The latest computers, the newest wireless gadgets, MP3 players, sun glasses that play music; to me, technology is just plain fun! No chauvinism intended, but maybe this fascination with new technology is coded on the Y chromosome. My generation was the testing ground for the technological revolution of the late 20th century. I was among the last to experience the now ancient early generation computers including punch cards and FORTRAN. Or the pre-word processing IBM electric typewriter with the rotating font (err, letter) ball and of course, white-out for correcting mistakes. My olfactory centers can even recall the smell of the liquid toner used with the old mimeograph machines to make the earliest version of "photocopies." And thank heavens for Powerpoint. I was running out of storage space and cataloging capacity for more than 2,000 slides.

Fast forward to the early 21st century. In the spine world, technological advances hold great potential in helping physicians improve patient care and alleviate patients' suffering. However, I worry that we are beginning to expect technology to provide, or more concerning, replace the human touch, like actually talking to and examining patients! I understand that advances in technology are much more good than bad. However, some trends that I have seen are disturbing to me. For example, in the past several years, when patients schedule

appointments, they inquire whether they should have an MRI before their appointment. Not a big deal you say? How about the increasing number of patients who have told me that other physicians have requested the imaging studies before deciding if they would even see them as a patient. Imagine, relying on a technological test, which may or may not even correlate with the patient's symptoms, as the screening tool to determine if a patient is appropriate to see a spine physician.¹

What if the MRI was not the right diagnostic test for that particular patient? Or what if the MRI was read incorrectly by the radiologist or if subtle but significant pathology was overlooked that would have been become more relevant from the personally directed history and physical exam? During case presentations at local and national conferences, the trend that I have seen is that after a brief history is presented, the next question is "What did the MRI show?" Excuse me, but did we forget a step here?

My wife, who is a gastroenterologist, told me recently about a resident who presented a case to her of a patient with abdominal pain and when she asked what the abdominal "exam" showed, the resident replied "The CT scan was normal." That in itself is alarming enough, but when asked why an abdominal exam wasn't done, the response was, "Why do I need to do the exam, if the CT was normal?" And when asked if she at least reviewed the CT scan herself, the re-

sponse was negative. It appears this trend toward test-reliance is not just restricted to the spine world.

I have real concerns about what is happening in medical education with respect to taking a history and performing a physical exam. Like many of you, I can distinctly remember my first history and physical examination as a third-year medical student on a real patient. The history seemed like it took two weeks to elicit, blabbering through 10 or 15 questions for each review of systems. I still remember listening to that person's heart for what seemed like 30 minutes to try to distinguish between splitting of the S2 heart sound or a flow murmur.

Even in medical training today, a disproportionate amount of emphasis is spent on the "skill" of ordering diagnostic tests and making treatment determinations based solely on the results of those tests. Taking a history has been synthesized to a well-tuned intake form. The physical exam of the spine has become reduced to a cursory few observations including watching the patient walking on his toes and heels and then bending forward and backwards. The real physical exam today has become the ordering of diagnostic tests. Maybe I am out of touch with the new generation, or just a bit too sentimental, in wanting to rely on the history and physical examination to formulate a differential diagnosis and develop a treatment plan.

It is true that diagnostic technologies have improved greatly over the past two decades to the point where the sensitivity and specificity of many tests have outperformed the history and physical exam.² Nevertheless, it is distressing to see, for example, a patient being treated with physical therapy, epidural steroid injections and ultimately surgery for a C7 radiculopathy with an MRI showing an appropriately located C6-7 herniated disc who has symptoms of numbness and tingling in their second finger and thumb, who if fully evaluated with a

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classic history and physical exam, would have been diagnosed with the more relevant symptomatic condition of carpal tunnel syndrome.

A few of years ago I had a number of patients who came into my office for evaluation of low back pain who were asked, after taking their history, to put on a gown for an examination. These patients questioned why I was having them put on a gown because despite having seen other practitioners for back pain, they had never been asked to disrobe before. I found that rather odd and disturbing. So I decided to do a very brief, clinical pilot study that I ultimately affectionately named the "Did you take your clothes off study?" I wanted to determine if most people examined for low back pain were done so in a gown or shorts or merely examined in whatever clothes they wore to the office that day. I also wanted to know if the physician actually touched the patient to assess the low back and measure leg strength, etc, and how these patients rated the overall quality of the exam from one to 10, with 10 indicating a top rate exam.

My very unscientific study demonstrated that most spine physicians did some form of examination, even though a disturbing minority did none at all; most, but not nearly all had the patient change into some type of gown or shorts; and most patients rated the physicians much higher if the examination included actually touching the back as part of the exam. I did not find any difference

between the specialty of the physician (orthopedics, neurosurgery, physiatry, primary care, pain management, etc) who had seen the patient and whether they were examined, had changed into some type of gown or shorts and their overall rating by the patient. No, the study was never published; not likely it would past muster as evidenced-based medicine.

As newer and better technology evolves (I am waiting for the MP3 player that hooks into my bicycle helmet), I hope we do not forget that, of the many tenets in medicine, a thorough evaluation includes actually talking to the patient and the "laying on of hands." Realistically, everyone's skills are different, but we must hope that the performance of a history and physical examination is not a lost art. When done well, it should help us improve our diagnostic accuracy. And consider this, the influence of talking to and touching a patient may even have some beneficial effect on the patient's healing. Just keep technology in its place.

References

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