GUEST FEATURE

Augmenting the human touch

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The key to the modern physical exam is not just the human hand, it is one hand on the patient and another holding a radiographic image.

In July 2011 Dr. Abraham Verghese declared at TEDGlobal that "the most important innovation in medicine to come in the next 10 years...is the human hand."[1] Although somewhat facetious, he discussed how a thorough physical examination remains the great key to superior patient care and medical insight.

Equally as thought-provoking as Dr. Verghese's talk are the viewer comments posted under the video. They illustrate the tensions in medicine between effective diagnoses and the art and frustration of the physical examination. A patient may appear perfectly normal with a benign exam, but have a terrible malignancy only detectable through blood tests.

Conversely, a patient may be taken to CT scan only to find a palpable breast malignancy missed many times during rushed, superficial physical exams. Advanced technology gives exact and quantifiable answers often undetectable by exam, but a comprehensive physical provides context and focus to the ordering of expensive tests. For a patient, the physical examination shows one thing: The doctor's concern.

Before the recent explosion of medical technology, examining the patient exemplified care and established diagnosis. After Dr. René Laennec invented the stethoscope in 1816, physicians began to spend significant time listening to their patients' chest, neck, and abdomen. "Inspection, auscultation, percussion, and palpation" was the foremost and final test. No radiographic test could illuminate what a cursory exam had missed because the stethoscope was the *be all and end all*. The act of examining required such intense focus and time, patients could feel nothing but great worth in the eyes of a doctor.

Now, according to a 2010 study, patients actually feel *more* confident in a physician's diagnosis if a CT scan is performed during their workup.[2] So often today, if the lungs sound "junky," no further time is spent at bedside because the pulse-ox, x-ray, and CT scan are assumed to show the quantifiable answer. Although technology has changed, the approach to examination and addressing patient concerns and fears remains the same.

The solution to reinvigorating the physical exam lies between the ways of the ancients and the great advantages modern medicine affords. A perfect method of examination efficiently provides quantitative results and allows for thorough exploration of the signs and symptoms. The key to the modern physical exam is not just the human hand; it is one hand on the patient and another holding a radiographic image.

In a world of increasing scrutiny toward the medical field and the growth of patient feedback scores, it is in the physician's and hospital's best interest to attend to a patient's emotional needs in addition to the chief complaint. Regardless of the imaging modality chosen to augment examination, the image should return to the patient's bedside.

With ultrasound, the woman with frequent abdominal pain can watch and learn as the screen displays pictures of an enlarged gallbladder filled with stones. Because so many emergency departments are equipped with computers at the bedside, the chronic smoker with COPD can see his barrel chest on x-ray. A woman with increasing pain and distention can visualize the ovarian mass on CT, helping to eliminate the mystery of her condition and allowing her to understand why the doctor pushed on her abdomen in the first place.

Bringing the image to the bedside completes the circle of patient care and provides opportunities to further education and satisfaction. Explaining the x-ray or ultrasound may take a few more minutes in the chaos of the emergency department, but it restores the human touch to the care of the sick. Besides, a picture is worth a thousand caring words. ■

References

1. Verghese, Abraham. "A doctor's touch." TEDTalks, TED.com. Filmed 2011. http://bit.ly/doctorstouch-ted.
2. Baumann BM, Chen EH, Mills AM, et al. "Patient Perceptions of Computed Tomographic Imaging and Their Understanding of Radiation Risk and Exposure." *YMEM*. 2011;58(1):1–7.e2.

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