

count more on their clinical faculties when making decisions about patients.

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EDITOR'S NOTE

The Value of History Taking in Diagnosis

The research letter by Paley et al reminds us of the value of lower-tech ways of making a diagnosis of patients seen in the emergency department (ED), as technology increases in availability and complexity and because ED health professionals now routinely order imaging tests, not uncommonly without even examining patients. The authors found that patient history was the key element in formulating a correct diagnosis and, along with physical examination and basic tests, established most diagnoses.

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INVITED COMMENTARY

Medical Technology—Still an Adjunct to Clinical Skills in Making a Diagnosis

The main responsibility of the physician to a patient is to make an accurate diagnosis so that appropriate treatment can be instigated. For centuries the physician had only the history and physical examination as the instruments to use in making a diagnosis of the patient's illness. Gradually, basic laboratory tests were added, and at the beginning of the 20th century, radiography and later electrocardiography were developed. Most patients with symptoms sufficient for them to appear in an emergency department (ED) have a wide variety of illnesses, many of which are readily diagnosed without sophisticated imaging techniques. So how important in arriving at a correct diagnosis are these modern (and expensive) imaging devices for the usual spectrum of diseases seen in the ED?

Over the years there have been many previous studies¹⁻³ performed on ambulatory patients supporting the major contribution of the history and physical examination in making the correct diagnosis in patients with medical diseases, with laboratory studies important in the minority of cases. The study by Paley et al⁴ appears to be the first prospective study done on patients sick enough to be admitted to the hospital that convincingly shows that a physician with 4 years' experience in the ED can make a correct diagnosis in the ED 80% and the senior hospitalist 84% of the time, using mainly the history, physical examination, and basic laboratory tests without the use of the modern imaging techniques. The history alone was most valuable approximately 20% of the time, and although the physical examination alone was most valuable less than 1% of the time, when used in conjunction with the history, the physical examination doubled its diagnostic power to almost 40%. Less than 10% of the time both missed the correct diagnosis. Computed tomography was used 12% of the time, mostly for head examination, and ultrasonography, I assume including echocardiography, was used less than 4% of the time.

It would be helpful to know how many hospitalists took part in the study. The more physicians involved, the less likely that we are dealing with exceptionally talented clinicians and the more generalizable the findings become. It would also be helpful if the diagnoses that were made in these 442 patients, as well as the 10% of diagnoses missed by both the ED physician and the hospitalist, would be listed in a table. The high diagnostic accuracy using predominantly the traditional tools of history, physical examination, and basic laboratory tests would be less exciting if the majority of the patients had asthma, upper respiratory tract infections, urinary tract infections, or psychological problems.

Having been an internal medicine resident and cardiology fellow in the 1950s and practiced for the first 12 years in the era before echocardiography, I can attest that our experienced cardiologists could make an accurate diagnosis with these basic diagnostic tools most of the time.