Like a great many others, I share the dubious distinction of having completed my cardiology training prior to the advent of much of the technology we routinely use today. Therefore, mastering the physical examination was a crucial aspect of fellowship, and the ability to reach a comprehensive diagnosis at the bedside was a mark of an excellent cardiologist. We strove not only to elicit every bit of information possible from auscultation, but were often reminded that Wenkeback first described his heart block phenomenon based on examining the jugular venous pulse. Among internists, cardiologists took pride that they could most often identify the presence and extent of disease without the necessity of laboratory testing.

The role of the physical examination, in general, and the cardiovascular examination in particular, has certainly changed today. The availability of potent noninvasive technology can now largely provide the information available from the physical and a great deal more. The explosion of knowledge in both diagnostic and therapeutic procedures has limited the time that can be devoted to mastering the cardiac examination. This had led some to question the role of physical examination in contemporary cardiology, or lack thereof.

There is little question that the cardiovascular physical examination is subject to many limitations. It is indirect and imprecise in assessing cardiac events. Whether inspection, palpation, or auscultation, there is no direct identification of a cardiac lesion. The arterial and venous findings of great value in diagnosing and quantifying abnormalities may be modified by local factors. Moreover, there are some phenomena that the physical exam is just incapable of evaluating, notably regional dyssynergy and ejection fraction. The findings of the physical examination cannot be hard copied, stored, or transmitted to others. Thus, in its finest hours the physical examination is restricted in the amount of information that it can provide.

The limitations of the cardiac physical examination are greatly compounded by the lack of skills of recently trained physicians. Whether residents, primary care physicians, cardiology fellows, or faculty, systematic studies have shown a 20% to 80% error rate in recognizing simulated or actual findings (1–5). These reports are certainly consistent with my own experience. During my thirty or so years as a faculty member, I have observed a definite erosion of auscultatory skills in residents and fellows. It is always amusing when trainees credit me with extraordinary prowess for making the most basic observations on physical exam. So diminished are examination abilities (and so available is noninvasive testing) that residents often make little or no attempt to perform the function.

Given the aforementioned circumstances, one can question whether it is worth the effort to try to restore expertise in performing the physical. Clearly, some findings on examination are very valuable and not readily obtainable by laboratory testing. Jugular venous distention, pulmonary rales, gallops, and pericardial function rubs are findings with diagnostic, therapeutic, and prognostic significance not readily obtainable by noninvasive methods. So it is foolhardy to think that the physical has lost all clinical value and is no longer necessary. The stethoscope has a secure place in the medical armamentarium. The real question is what is its role in a world of rapidly developing technology and the increasing depth and complexity of medical knowledge.

Technological advances have resulted in miniaturization of a number of noninvasive devices. Primary among these are echocardiographs. Handheld ultrasound instruments are now available that yield imaging and Doppler recording sufficient to enable most usual diagnoses. These devices have been found to be superior to the physical exam in detecting a number of cardiac abnormalities. It has been suggested that such instruments will supplant the stethoscope and physical exam in the near future. However, handheld echo machines will have to become smaller and less expensive before they become as fully integrated into daily practice as the stethoscope. In addition, the educational effort required to achieve proficiency with these instruments will almost certainly be on the same order as that required for auscultation, and similar issues regarding competence can be anticipated.

Despite its imperiled status, several factors present in contemporary medicine seem to be conveying increasing importance to the physical. Noninvasive testing is expensive and often time consuming, and the need for cost efficiency has placed greater emphasis on the physical exam. Given the prevalence of functional murmurs, a well performed physical could avoid many echocardiograms. Of perhaps greater importance, there has been a progressive loss of contact between patients and physicians in recent years. The “laying on hands” which has been such an integral part of the healing art of medicine through the years is disappearing. I personally regard this as a very negative trend; during my own illnesses I have found the contact of the physical exam
as comforting and reassuring. If the cardiac examination served no other purpose than to provide the setting for such interaction, it would seem to be worth the effort.

So, wither the cardiac examination. Firstly, I think it must be acknowledged that it no longer occupies its position of primacy in patient evaluation. It has always been limited in the information it could provide and now is often performed imperfectly. New technology can provide superior information noninvasively, and will likely soon be available in small inexpensive instruments capable of being carried by physicians like stethoscopes. However, the physical will always be an integral part of patient evaluation. It will provide some unique information, and often be adequate by itself to assess certain cardiac conditions. More importantly, it will continue to provide an excellent vehicle for the physician–patient physical contact that will always be so important to the healing art of medicine. Educational meetings in general, and bedside teaching in particular, should emphasize the physical exam. The noninvasive laboratory offers the ideal opportunity to demonstrate physical findings in a setting where they can be immediately confirmed by direct recordings. The availability of handheld technology will enhance the physical, but not eliminate it. Recognizing this, I believe that it is critical to once again focus efforts on transmitting the skills required for the physical exam to our trainees and colleagues. We need to enhance skills in cardiac examinations; it will have a role in patient care as long as physicians do.

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