CHAPTER **35**

PERSPECTIVES ON MEDICAL CLEARANCE

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Medical clearance of a patient prior to an anticipated elective surgery may not always be given a great deal of special consideration. Sometimes the clearance process may even be viewed as an unnecessary step in the process of getting the patient to surgery. In this article I will present some of my thoughts and opinions on this sometimes controversial subject. They are just my opinions, and I in no way imply that if someone handles these situations differently that the standard of care has been breached. Several of the recommendations I make are a result of having served as defense expert for litigation of allegations involving a lack of adequate preoperative medical clearance. It is unlikely that the reader will agree with me on all points. However, my goal is not to create universal agreement but rather to stimulate the reader to consider some aspects of medical clearance that previously had not been given particular attention. Because this is not a journal article, I write in a somewhat informal conversational tone. The paragraph headings are questions I've asked myself or other practitioners regarding this topic. For each I try to present some semblance of a logical response. Throughout the article I use the pronoun his only as a matter of convention.

WHAT IS MEDICAL CLEARANCE?

The word clearance itself is probably a poor choice of words to describe what it is that is supposed to be accomplished by the preoperative medical consultation. I personally do not like the term, but as many others do, I continue to use it. In normal parlance, to be cleared to do something implies that some degree of permission has been granted for the particular event, such as when a pilot has been cleared to land an aircraft. However, when we send a patient for a preoperative medical clearance, we are not asking for the medical consultant's permission to perform the suggested procedure. The permission comes from the patient (and of course the hospital and anesthesiologist). Let us consider the analogy of sending someone for vascular (as opposed to medical) clearance. If the consult note comes back to us and says "cleared from vascular standpoint," that would confer to me that the vascular surgeon thought that the patient was at low risk for wound healing problems from a vascular standpoint. However, if I see the phrase that patient was "cleared from medical standpoint" I would understand that to mean that the patient was deemed to be at an acceptable risk for peri-operative complications. However, acceptable does not have to mean low.

There is no requirement that the medical clearance be conveyed in any particular format, but most commonly it is expressed as a part of a complete history and physical. However, it does not have to be, and the opinion and recommendations could be written in a letter, or even on the front of a prescription pad (although probably not ideal).

ELEMENTS OF THE PREOPERATIVE MEDICAL CONSULTATION

The preoperative medical consultation is typically initiated by a specialist who has recommended that a patient have surgery. There are three primary elements that should be a part of this encounter.

A Detailed Assessment and Update of the Patient's Medical Conditions

Essentially we need to know up to date information about the patient's known medical problems and how well they are controlled. Before making a determination, the medical consultant may recommend labs, tests, or other consults (e.g., cardiology).

As a side note, it is worthwhile to remember that rarely would a patient have an invasive cardiac procedure (coronary angioplasty, or coronary bypass) for the primary purpose of lowering the risk of peri-operative complications for an elective orthopedic-type procedure. The overriding theme is that if the cardiac condition warrants intervention, it should do so on its own, regardless of whether the patient was to have elective surgery.

Pursuant to this investigation, the medical consultant may suggest changes or additions to the patient's medical therapy. Once this occurs, the consultant will generally refer to this as the patient being medically optimized, which means that the patient is as good as he is likely to get.

Peri-Operative Recommendations

This refers to any specific advice, recommendations, changes in medical therapy, etc. the medical consultant has for the patient during the peri-operative period.

Formulation of an Opinion Regarding the Patient's Risk for Peri-Operative Complications

Admittedly, this is difficult if not impossible to numerically quantify. Therefore, what we are really looking for is to learn the patient's stratification of risk (e.g., low, moderate, or high risk) for peri-operative complications. But here is an example of where the analogy between medical clearance and vascular clearance breaks down. A patient with severe vascular problems would be at high risk for wound healing problems for most any foot surgery you could think of, and therefore almost none would be considered. However, there are a wide range of surgeries that might be performed on a patient with severe medical problems depending on the particulars of the circumstances.

In order for the medical consultant to establish the risk, it is imperative that we provide as much information as possible about the proposed procedure (degree of surgical trauma, length of the procedure, type of anticipated anesthesia, etc.). These variables affect the statistical likelihood of an adverse peri-operative event. A vascular surgeon for the most part will not care so much what particular foot surgery you are contemplating. They will either all be expected to heal or not heal based on the particulars of the vascular status not as much on the particulars of the surgery. Conversely, the medical consultant should be very much concerned about the particulars of the surgery. All other factors being equal, a three hour rearfoot fusion unquestionably poses more surgical stress than a 20 minute digital arthroplasty. But the medical consultant may not fully appreciate the difference between one foot surgery and another if we do not provide the specifics. Furthermore, with foot surgery, there may even be a tendency for the medical consultant to underestimate the degree of surgical stress involved in certain podiatric surgeries, not realizing that a major rearfoot fusion could be as surgically stressful as a knee replacement.

So my definition of medical clearance is a patient that has had a medical consultation that contains the above elements. It should be clear that the medical consultation does not (and some authors even state should not) have to explicitly state that "the patient is medically cleared."

ARE A HISTORY AND PHYSICAL (H&P) AND MEDICAL CLEARANCE THE SAME THING?

No, technically, they are not the same thing. While it is true that some H&Ps will contain the elements qualifying them as medical clearance, they of course do not have to. The general distinction between a medical H&P and a medical clearance H&P is the later is one that is performed in the context of an anticipated elective surgery. Is the difference significant enough to warrant further discussion? I believe it is. Let us consider the situation where a hospital requires podiatrists to have a medical H&P in addition to our podiatry H&P. In this example, our podiatrist wants to perform surgery on a patient who had recently seen his primary care physician for an annual physical. To satisfy the hospital's requirement of having a medical H&P on the chart, the podiatrist has the patient obtain a copy of this document. However, although the hospital requirement was met, it is not the same as having obtained medical clearance. If a patient like this were then to have a peri-operative myocardial infarction, we might be challenged as to why we did not order a medical clearance consult instead of having merely obtained a copy of the patient's medical H&P.

Certainly situations like I just described do come up, and in the event when a patient was recently seen by his primary care physician, I would consider placing a call to him advising that elective foot surgery was being contemplated. In this way the primary care physician can then direct me as to any further action that needs to be taken.

WHAT ABOUT SENDING PATIENTS DIRECTLY FOR CARDIOLOGY CLEARANCE?

The specific situation I refer to, is one in which a patient is not sent to a primary care physician, but instead (probably due to a known abnormal cardiac history) is sent directly to a cardiologist. In my opinion, a better option (even in the case of a patient with a cardiac history) is to send the patient to his/her primary care physician first and let the internist take it from there. Most primary care physicians that perform preoperative clearances (interestingly, not all do) have some familiarity with the American College of Cardiology Guidelines, which direct the clearing physician as to which patients warrant cardiac consultation. There are some situations where even patients with serious but stable cardiac conditions, do not need cardiology consultation or clearance.

However, specifically to the point, I personally would no sooner send a patient with a cardiac history directly for cardiology clearance, than I would a patient with chronic obstructive pulmonary disease directly for pulmonary clearance, or a patient on dialysis for nephrology clearance. I feel that is the role of the internist/medical consultant.

IS IT ACCEPTABLE TO USE A CLEARANCE THAT WAS PERFORMED IN THE CONTEXT OF A DIFFERENT SURGERY?

By way of example, consider a patient that received medical clearance by his primary care physician for a total knee replacement. Subsequently, the patient's podiatrist recommends the patient have foot surgery to be performed within 30 days from the date of the clearance. In my estimation, there would be little reason to send the patient back to the clearing physician for foot surgery clearance after just having been cleared for knee replacement. So, contingency #1 is that the subsequent procedure be of equal or less surgical stress than the procedure for which the patient received medical clearance. In contrast, if the patient was cleared for a 30 minute carpal tunnel release but the podiatrist planned to perform a 3 hour rearfoot fusion under general anesthesia, separate clearance should be considered. Contingency #2 is that the clearance was performed within a reasonable period of time. Thirty days would be reasonable, although there's nothing to say that it has to be within 30 days. An issue like this would also normally be addressed by the hospital's rules and regulations regarding H&Ps. This points out a good reason to talk to the patient the day of surgery and inquire as to how he is doing in general and if anything has recently changed (blood sugar, any chest pain, breathing problems, etc.) even from the time he saw the medical consultant.

WHAT IF THE CLEARING PHYSICIAN STATES THAT THE PATIENT IS NOT CLEARED FOR SURGERY?

As earlier stated, a medical consultation note that does not say " the patient is medically cleared" does not in and of itself mean that the patient is not cleared. What I am referring to here is where the medical consultant either explicitly states that "the patient is not cleared for surgery" or will not give an opinion as to the patient's risk category. If this is the case, a simple phone call to ask the medical consultant to give an opinon as to the patient's risk status should suffice to complete the necessary elements.

Also, you may encounter a situation where the medical consultant recommends further labs, tests, consultations, and therefore "provisionally" has refused to clear the patient, until receiving further results to consider. This should not be difficult to determine, and generally the surgery would be postponed until the work-up has been completed.

But what if the clearing physician has completed the work-up and explicitly writes that the patient is not cleared for surgery? This can sometimes be a genuinely difficult situation. If the medical consultant has determined that the patient is at high risk for peri-operative complications with the proposed surgery, then he should say "the patient is at high risk." When a consultant writes that a patient "is not cleared" for surgery, it often means he believes that the risks of the procedure outweigh the benefits. There is a world of difference between the two phrases "John is at high risk for peri-operative complications from surgery" versus "John is not cleared for surgery." Medical consultation is meant to determine risk, not to compare those risks to the benefits. There is of course nothing to say that the medical consultant cannot express his opinion of the risks versus the benefits, but that opinion is separate from the true purpose of the medical consultation. Once a decision (for anything) is made, based on some analysis of risks versus benefits we add the element of whether we should do something or not. I just point out that the medical consultant, while being the most knowledgeable about the risks, may not as well understand the benefits; therefore we should exercise discretion when comparing the two and rendering judgment.

WHAT DOES MEDICALLY OPTIMAL MEAN?

Some medical consultants will use a phrase like "patient is medically optimal for surgery." This is fine as long as the risk category is also separately addressed. However, the term "medically optimal" by itself is probably insufficient. The phrase really means that the "patient is as good as he/she is likely to get." A medically optimal patient could on one extreme be a completely healthy patient or on the other a very unhealthy individual with multiple medical problems. But as long as that particular patient (healthy or unhealthy) is as "good" as he is likely to get, he is technically and medically optimal. A patient with inoperable coronary artery disease might be medically optimal (as good as he is likely to get), but that does not mean that patient is necessarily a good candidate for reconstructive foot surgery. When I see this particular phrase, I either just accept it and proceed with surgery (for younger healthy patients) or I call the clearing physician (in the case of older patients with more complex medical histories) to get an estimation of the patient's peri-operative risk.

DO YOUNG HEALTHY PATIENTS NEED TO BE SENT FOR PREOPERATIVE MEDICAL CONSULTATION?

No. Only the patients who say they are, but really are not. Just make sure you can tell the difference. Certainly you could argue that a young, healthy person with no medical problems would receive little benefit from the time and expense of a separate preoperative medical consultation. The unfortunate reality though is not all patients that represent themselves as being free of medical problems actually are. Some of these patients do not even have primary care physicians and the ones that do may not have had a comprehensive H&P in years. We operate on a lot of patients in their 30s and 40s that according to their histories are problem free. For this group of patients I tend to send them for the medical consult. When considering healthy children and teenagers I tend to call the pediatrician to ask for a clearance note. If they are resistant to writing the note unless they see the patient, then the patient gets sent. It is a matter of the risk (of missing something significant by not sending the patient for medical consultation) outweighing the benefit (lack of additional cost and inconvenience).

WHO CAN PERFORM A MEDICAL CONSULTATION FOR THE PURPOSE OF MEDICAL CLEARANCE?

Any physician that can competently evaluate medical problems, make peri-operative recommendations, and determine risk stratification can perform a medical consultation. Most importantly it is not specialty-specific. Physicians other than the internists and family practitioners can perform medical clearance consultations.

ARE ANESTHESIA CLEARANCE AND MEDICAL CLEARANCE THE SAME THING?

The short answer is no, but I will qualify this answer. Consider a situation where a patient was not sent for preoperative medical consultation. By the time of surgery, there were two H&Ps on the chart (one by the surgeon and the other by the anesthesiologist). During the surgery, a major adverse intra-operative event occurs. Later it is determined that the patient had unrecognized coronary artery disease. An allegation is made against the surgeon for failing to have obtained preoperative medical clearance. The surgeon pleads that "anesthesia cleared the patient." However, the anesthesiologist contends "no, I performed anesthesia clearance" – translated: formulation of the anesthesia plan, which per the anesthesiologist is separate and distinct from medical clearance of the patient."

I personally believe that an anesthesiologist is competent to perform preoperative medical clearance, and well knows when a patient should be sent for further consultation (such as cardiology). However, the point I want to emphasize is that if it is your understanding that the anesthesiologist is the individual intended to medically clear the patient, then you need to request that the anesthesiologist write a brief statement that the patient is "medically cleared for surgery." That way there will be no misunderstanding if a peri-operative adverse event occurs.

SHOULD PODIATRISTS PERFORM THEIR OWN COMPLETE H&PS?

In this context, I am defining a complete H&P as one that contains examination findings of the heart, lungs, abdomen, etc. (This is distinct from a "medical clearance" H&P, which contains the element of risk stratification, etc).

I will answer by saying if a podiatrist (or any other physician for that matter) chooses to perform complete H&Ps there are some precautions that should be considered. It is essentially an issue of documenting findings concerning areas of the body outside of the expertise of that physician. How often have we seen H&Ps by primary medicine specialists with lower extremity findings that are abjectly inaccurate? They get off easier in my opinion, because they can dabble around the lower extremity examination (in which they lack expertise) easier than we can the heart and lung examination (in which we lack expertise). Would you want to depend on an orthopedist to pick up your child's heart murmur? No, of course not. Then why are they and we doing these examinations? The answer is simple and understandable. It is one more opportunity to pick up on something, that was not identified prior. In the situation where a primary medicine specialist misses something and we miss it also is forgivable. (After all, the medical consultant missed it too). But if we never consulted the internist, then it just leaves us (the non-expert) taking responsibility for the heart and lung examination, and I do not believe all (or enough worth considering) of the burden can be shifted to anesthesia.

If, as a part of a residency program (as most if not all now are) a podiatrist was trained to do heart and lung examinations, then I believe he would be qualified to continue doing these examinations in active practice. Moreover, if the podiatrist (in active practice) on a regular

basis examines heart, lungs, abdomen, etc., I take no issue with this. But if we no longer actively perform these on a regular basis, and do not have proficiency at doing them, then it is best not to do them at all. This is not an area to dabble in.

Anecdote #1: At the hospital where I practice, a patient was scheduled for a minor orthopedic procedure and was not sent for a separate medical clearance consultation. At the time of surgery there were therefore, two H&Ps on the chart (one by the orthopedist and the other by the anesthesiologist). However, unbeknownst to the patient, and not picked up on by the orthopedist (who documented a heart, lung, and abdominal examination) or anesthesiologist, the patient had a critical aortic stenosis. Unfortunately during surgery, as a result of the intravenous fluids that were infused, the patient went into heart failure requiring admission to the intensive care unit. I have no personal knowledge of the outcome, but I will create a plausible albeit hypothetical one. A hospitalist and cardiologist were consulted and documented the murmur. An echocardiogram was ordered and confirmed the finding. Let us fast forward to the point where litigation ensued contending that the abnormal cardiac finding should have been identified on auscultation by an individual competent at cardiac auscultation. Unfortunately, the fact that the anesthesiologist also missed it would offer little consolation to the orthopedist, and likely there would be some shared liability for the missed examination finding.

Anecdote # 2: (Hypothetical). Same circumstances as above except that in this example it is an elective surgery that was performed at a facility that uses a preprinted H&P form (I personally despise these forms) with "Heart _____" "Lungs_____", etc. preprinted on the form where the surgeon is expected to just fill in the blanks. The examination section is then filled out by the surgeon and states: Heart: RRR, no murmurs; Lungs: CTA. Same patient, same complication. But in this case upon deposing the surgeon and his nurse (or medical assistant) it is learned that the surgeon has never been witnessed to perform a heart or lung examination on any patient, let alone this particular one. The surgeon admits that in fact he does not really perform chest auscultation, and on healthy patients that are not sent for separate medical consultation, he just fills in the blanks with a few benign sounding phrases to complete the form. I do not need to argue further that this is a disaster. The first example illustrates some degree of incompetence or inexperience. The second example shows dishonesty.

CONCLUDING THOUGHTS

We need to be cautious of written protocols that exist in our offices, and statements that we make in our notes. If for example, we have a written policy that states "prior to elective surgery, patients will have medical clearance," then this must be done, or there needs to be some sort of documentation stating why in a particular situation medical consultation will not be done. The problem comes when an adverse peri-operative medical event occurs in the situation where we said (e.g., by way of a written office policy, or wording in a patient's medical record) the patient was to receive preoperative medical clearance but does not. Even if there are good reasons why the patient did not need to have a separate preoperative medical consultation, it is difficult to make the argument after the fact.

Finally, if we have made the decision to send a patient for preoperative medical consultation we need to make sure to carefully read what is sent over by the clearing physician. If there are recommendations of other laboratory test to be ordered, consults to be obtained, medications to be changed etc, it is important that these be followed-up.