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The role of the medical consultant

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Internists as well as subspecialists are often asked to evaluate a patient prior to surgery. Many primary care physicians, however, feel inadequately trained to function as consultants for preoperative medical evaluations [1]. Additionally, a recent survey of hospitalists found preoperative medical consultation to be an area of importance and one in which the hospitalists felt a need for additional training [2]. Much of the literature on perioperative medicine and medical consultation has been scattered among different disciplines, and only recently has this information appeared in medical journals and textbooks typically read by internists.

The role of the preoperative medical consultant is to identify and evaluate a patient's current medical status and provide a clinical risk profile, to decide whether further tests are indicated prior to surgery, and to optimize the patient's medical condition in an attempt to reduce the risk of complications. Knowledge of medical illnesses that influence surgical risk, an understanding of the surgical procedure, effective communication and interaction with the other members of the preoperative team, and integration of a management plan are crucial for the medical consultant. This article focuses on the general principles of consultative medicine, techniques to improve compliance, and the concept of risk assessment. Specific aspects of preoperative risk evaluation and perioperative management as they pertain to individual organ systems are discussed in subsequent articles.

General principles of medical consultation

The American Medical Association (AMA) noted nine ethical principles pertaining to consultation [3]. Three of these pertain to the referring physician:

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(1) consultations are indicated on request in doubtful or difficult cases, or when they enhance the quality of medical care; (2) consultations are primarily for the patient's benefit; and (3) a case summary should be sent to the consulting physician unless a verbal description of the case has already been given.

The other six ethical principles of consultation address the responsibilities and role of the consultant: (1) one physician should be in charge of the patient's care; (2) the attending physician has overall responsibility for the patient's treatment; (3) the consultant should not assume primary care of the patient without consent of the referring physician; (4) the consultation should be done punctually; (5) discussions during the consultation should be with the referring physician, and with the patient only by prior consent of the referring physician; and (6) conflicts of opinion should be resolved by a second consultation or withdrawal of the consultant; however, the consultant has the right to give his or her opinion to the patient in the presence of the referring physician.

The concepts for performing effective consultations were described by Goldman's "Ten Commandments" [4]. These include: (1) determine the question; (2) establish urgency; (3) look for yourself; (4) be as brief as appropriate; (5) be specific and concise; (6) provide contingency plans; (7) honor thy turf; (8) teach with tact; (9) talk is cheap and effective; and (10) follow-up.

Determining the question

It is of paramount importance for the consultant to determine precisely why the consultation was actually requested. The manner in which the referring physician phrases the request can influence the consultant's response. For example, the consultant is often asked (inappropriately) to "clear a patient for surgery." Beside the fact that this phrase should never be used because it incorrectly implies that if a patient is "cleared," he or she will not develop any postoperative complication, it does not specify what the referring physician really wants. The surgeon may be asking for surgical risk assessment, approval to operate, diagnostic or management advice, reassurance, or documentation for medical legal reasons. Without effective communication, the consultant's response may not answer the question adequately. This need for direct communication in order to minimize the potential for misunderstanding was highlighted by two studies—the first study reporting disagreement between the requesting physician and consultant about the primary reason for consultation in 14% of cases [5], and the second study finding that no specific question was asked in 24% of consults for diabetic patients, and that consultants ignored explicit questions in another 12% [6].

Answering the question

Operative risk is the probability of an adverse outcome or death associated with surgery and anesthesia. It can be divided into four components:

(1) patient-related; (2) procedure-related; (3) provider-related; and (4) anesthetic-related.

The consultant, in conjunction with the other members of the team, must ultimately decide, based on the patient's risk factors, whether the patient is in his or her "optimal medical condition" or "acceptable" condition to undergo the planned surgical procedure. In order to do so, the following questions must be taken into account: (1) what is the status of the patient's health? (2) if there is evidence of a medical illness, how severe is it, and does it affect or increase operative risk? (3) how urgent is the surgery? (4) if surgery is delayed, will the severity of the medical illness be lessened by treatment? and (5) if there is no reason to delay surgery, what changes need to be made perioperatively in the patient's management?

An estimation of perioperative risk is based on a thorough history, physical examination, review of the available data, and selectively ordered laboratory tests (when indicated). This information should be obtained or confirmed independently, and the consultant should make an extra effort to obtain any additional existing information felt to be necessary to the evaluation. The consultant must also be able to function in the absence of complete data as it may be lacking, unavailable, or irrelevant to the question being asked.

The consultant's advice and recommendations need to be concise and specific to the question asked by the requesting physician. Whereas a subspecialist who is asked to evaluate a patient's preoperative cardiac status usually restricts comments to the cardiovascular system, general internists often are more compulsive and try to do more than they were asked. It is important to recognize that the internist's role as a preoperative medical consultant should focus only on issues relevant to the planned surgical procedure. If other problematic concerns unrelated to the primary reason for consultation are discovered, they can usually be addressed after surgery, but the consultant should first discuss them with the referring physician. The disadvantage of making a long list of recommendations that are not really pertinent for surgery is that the other more relevant recommendations may be ignored. Similarly, the consultant should restrict advice to his area of expertise and not make recommendations about the type of anesthesia to be given without having had formal training in anesthesiology. Comments such as "no absolute contraindication to general anesthesia" or "cleared for spinal anesthesia only" are of no value. As noted by Choi [7], "The prudent medical consultant is wise enough to choose the anesthesiologist rather than the agent or choice of anesthesia."

Improving compliance

Depending on the setting, referring physicians comply with the consultant's recommendations 54–95% of the time [8–12]. Factors influencing compliance are shown in Table 1 [13] and correspond to Goldman's Ten

Commandments [4]. As noted earlier, the primary reason for the consultation must be determined and addressed [5,9,12]. A timely response is important [14]. Urgent or emergent consultations need to be seen promptly, and elective in-patient consultations should usually be answered the same day as requested but in all cases within 24 hours.

The consultant's report should be informative yet concise. It should include an overall risk assessment, status of the patient for surgery, recommendations for management of the patient's medications perioperatively, and recommendations to minimize risk of postoperative complications, including prophylaxis for venous thromboembolism, endocarditis, and surgical wound infection. In order to highlight the most important information for the referring physician, we recommend a format where the first page of the written consultation report contains the reason for consultation, pertinent medical problems, impression as to whether or not the patient is in optimal medical condition for surgery, and recommendations for perioperative management. The history, physical examination, laboratory and test results, and additional discussion can follow on another page. Definitive language should be used [5,6,10,14,15], and recommendations should be prioritized, precise, and preferably limited to no more than five [11,12,16]. Recommendations felt to be "crucial" or "critical" are more likely to be followed [8,11,16], as are therapeutic as opposed to diagnostic recommendations [12,14]. Direct personal communication with the referring physician is preferable to only leaving a note in the chart [5,6,11].

The consultant's responsibilities rarely end with the initial preoperative consultation. Appropriate follow-up visits with documentation in the chart improve compliance [14,16] and may improve care. The patient's medical problems and type of surgery will dictate the frequency and duration of follow-up by the consultant. The consultant should sign off in writing when he or she no longer needs to follow the patient, and arrangements for long-term follow-up after discharge should be noted.

Table 1
Factors influencing or improving compliance with consultant recommendations

- Prompt response (within 24 hours)
- Limit number of recommendations (≤ 5)
- Identify crucial or critical recommendations (versus routine)
- Focus on central issues
- Make specific relevant recommendations
- Use definitive language
- Specified drug dosage, route, frequency, and duration
- Frequent follow-up including progress notes
- Direct verbal contact
- Therapeutic (versus diagnostic) recommendations
- Severity of illness

(*From* Cohn SL, Macpherson DS. Overview of the principles of medical consultation. In: Rose BD, editor. Wellesley, MA: UptoDate; 2002; with permission.)

Comanagement and benefits of medical consultation

Whether or not the consultant should write orders depends on the arrangement with the referring physician. In some cases the consultant is being asked only to provide an opinion or advice that the primary attending physician may or may not choose to implement. In other cases, the consultant may actually comanage the case. This latter scenario is being seen more frequently with the proliferation of hospitalists, managed care, and disease management programs. One small study demonstrated a decrease in length of stay when an internist routinely cared for patients after thoracic surgery [17], and comanagement of orthopedic patients with hip fractures and joint replacement surgery is increasing. Other potential benefits provided by preoperative medical consultants include findings of new diagnoses as well as assessments of pre-existing conditions resulting in changes in patient management, warranting additional work-up or treatment prior to surgery [18–24]. In this regard, they provide added value to the patient and referring physician. Additional outcome measures concerning quality of care should be forthcoming to determine their impact on optimal patient care.

Summary

The basic concepts of medical consultation have been reviewed. The referring physician and the consultant both have responsibilities to fulfill in order to maximize the effectiveness of the consultation in improving patient care. The reasons for and urgency of the consultation need to be communicated to and understood by the consultant. The consultant needs to respond by promptly evaluating the patient, concisely documenting his findings, and communicating his recommendations to the referring physician. As described by Bates, the ideal medical consultant will "render a report that informs without patronizing, educates without lecturing, directs without ordering, and solves the problem without making the referring physician appear to be stupid" [25]. The consultant should try to support the referring physician and comfort the patient. By following these guidelines, the consultant will be more effective in providing useful, informative advice likely to result in enhanced compliance with the recommendations and improved patient outcome.

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