Medical Management of the Surgical Patient

A Textbook of Perioperative Medicine

Fifth Edition
Michael F. Lubin MD

I would like to dedicate this book to
J. Willis Hurst – my teacher
H. Kenneth Walker – my mentor and co-editor
Robert Smith – my colleague and co-editor

Their contributions to this book are unseen but were critical to its successful completion

Thomas F. Dodson MD

I would like to dedicate this book to my wife, Jan, and my children, Thomas, Michael, and Amy. Their patience has been remarkable and their love and support have been graciously given.

Neil H. Winawer MD

I would like to dedicate this book to my wife Tamara, and my son Matthew for bearing with me during completion of this project and always. You are my everything.
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Preface

In 1977, Dr. Kenneth Walker called his young colleague, Dr. Michael Lubin, to tell him that there was going to be a new consultation service and he was going to be the first attending. Dr. Lubin replied, "A consult service? That’s great! I don’t know anything about that stuff." Dr. Walker said, "Don’t worry," and hung up the phone.

And now, 35 years later, I and my co-editors are publishing the fifth edition of our textbook on perioperative consultation! The core of knowledge in perioperative care has changed immensely; in 1977 there was no information until Dr. Lee Goldman’s seminal paper in the New England Journal of Medicine [1]. Since then, there has been an explosion of new information. Many medical people have built their academic careers in this area.

In some specialties, like cardiology, there has been a huge amount of exploration and progress, albeit along with some backtracking. In the previous edition, the latest advance was perioperative beta blockade; today, there is less enthusiasm for this intervention. While in the early days of cardiac evaluation, there was great emphasis placed on invasive testing and interventions, for many surgery patients there has been little benefit found in an aggressive approach to perioperative revascularization. The perioperative management of diabetes has also been the focus of much investigation. Indeed, progress is being made in a multitude of fields.

On the other hand, there are areas where there have been fewer advances. I would be very pleased to find better ways to determine which patients with pulmonary and renal disease are at higher risk for complications and death from surgical intervention.

This fifth edition will update the reader on the latest advances in perioperative care and surgical techniques. We have again gathered together the best people we can find to educate us in the best ways to handle the evaluation and care of patients who may need surgical intervention.

There have been some editorial changes as well. Dr. Robert Smith has retired; Dr. Thomas Dodson, our institution’s Associate Chairman of the Department of Surgery and the Chief of the Division of Vascular Surgery, has taken up Dr. Smith’s job of handling the surgical part of our book. Dr. Neil H. Winawer, selected as one of the 10 best academic hospitalists by the American College of Physicians, and editor-in-chief of Journal Watch Hospital Medicine, has come on board to help me with the medical sections.

As in previous editions, we have added new chapters to fill in perceived gaps. There are new chapters on consultation, transplantation medicine, and pain management. There is a new chapter on asthma management (how could we have missed that for four editions?). New surgical chapters include thoracic aortic disease, lung transplantation, esophagomyotomy, cervical spine surgery, reconstruction after cancer ablation, thyroid malignancies, vasectomy, and inflatable penile prosthesis.

We are firm in our belief that this book is an important part of the medical literature. Our target audience is all physicians who contribute to the care of patients in the perioperative period: anesthesiologists, surgeons, internists, and family physicians. The physician assistants and nurse practitioners who assist in patient care will find information that is valuable to them as well. We have again tried to make Medical Management of the Surgical Patient a usable and well-documented reference book. While there are excellent handbooks that address "only the facts," we feel very strongly that there should be to be a single-volume source for the background information to support the recommendations we have put forward.

Most of all, we hope that all of our patients receive better medical care because of the efforts of our authors.

We are indebted to Cambridge University Press for publishing this fifth edition. Their editorial assistance and patience are deeply appreciated.

Michael F. Lubin, MD

Reference

Introduction

The interchange between physicians discussing a patient's case has been mentioned in written history since ancient Greece. From the time of Hippocrates, physicians have been encouraged to seek consultation on difficult cases when they were in doubt. They were urged not to be jealous of one another but to realize their own limitations and to use the knowledge of their colleagues to help. "Nor, among physicians, do those who treat by diet envy those who employ surgery, but they even call each other into consultation and commend one another." It is clear, however, that there were disagreements in those days: "Physicians who meet in consultation must never quarrel or jeer at one another." There were also "wretched quarrelsome consultations at the bedside of the patient, with no consultant agreeing with another, fearing he might acknowledge a superior."

Over the next 25 centuries, consultation has had its ups and downs. Much of what was written had to do with the etiquette and ethics of the interaction. In medieval Europe, little changed from ancient times. Physicians were encouraged to ask colleagues for help if needed and to refrain from criticizing each other in front of non-physicians.

In the fourteenth century, patients were warned against consulting large numbers of doctors because there would be "endless disagreements and different suggestions" and "the patients [would] suffer from lack of care." The doctor could call in another physician for consultations, but the treatment should be administered by the one knowing the most about the case. Physicians, curiously enough, were warned about consulting with other physicians. "It is better if he have good excuses that he may refuse their demands. He may feign an injury, or illness, or some other likely excuse. But if he accepts their demands let him make a covenant for his work and make it beforehand . . . . Clearly advise the other leech that he will give no definite answer in any case until he has seen the sickness and the symptoms of the patient." At least the last is sound advice.

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The seventeenth and eighteenth centuries brought out the best and the worst in physicians. In Italy, Julius Caesar Claudinius wrote, "There is no part of a Physician's Office more illustrious than Consultation, because by it alone unlearned physicians are known from the Learned . . . . And there is nothing that brings greater advantage to the Sick." Contrast this with the following: "On December 28, 1750, Drs. John Williams and Parker Bennett, of Jamaica, having become involved in a wrangle about their respective views on bilious fever, came to blows, and, the next day, proceeded to a desperate hand-to-hand combat with swords and pistols, which ended fatally for both. It is said that Johann Peter Frank was so disgusted with the behavior of doctors in consultation that he advised the calling in of the police on all such occasions."

Again, in contrast to the brutish behavior in the British colony, John Gregory wrote that "consultation, when required, is to be conducted in a gentlemanly manner. The chief concern is to be the relief of the patient's suffering and not personal advancement. That is, the duty to one's patients takes precedence over personal and professional differences."

During the eighteenth century, there had been (and would continue to be) a great deal of competition between practitioners. At the turn of the nineteenth century, there was much activity in writing about the ethics of medicine, most of which was aimed at avoiding the harmful effect of this competition. Two men in particular bear mention – Johann Stieglitz and Thomas Percival.

In 1798, Stieglitz addressed the problem of the profession's internal difficulties and the distrust they engendered in the public. Many practitioners were afraid to admit their need for help and thus avoided consultation with more knowledgeable physicians. He encouraged consultation for the good of the patient while exhorting the consultants to treat the consulting physicians as colleagues and with respect that would only improve the public's view of the profession.

In 1803, Percival published Medical Ethics, a few years after he had been requested to write on the subject by his fellow physicians. Much of the book was devoted to the etiquette of professional interaction, and consultation was addressed in much the same manner as in centuries past: consultation should be obtained to help the patient; no jealousy, competition, or patient stealing should be tolerated; conflict in front of patients was to be avoided at all costs. It is a tribute to the relative timelessness of Percival's work that much of it was used almost verbatim in the AMA Codes of Ethics in 1847, 1911, and 1912.
In the late 1800s, another problem surfaced in England. A great gap had appeared between the eminent consultants and general practitioners. Although the former, because of superior knowledge and prestige, were able to command high fees from wealthy clients, they apparently continued to see less well-to-do patients for the same fees that were being charged by the general practitioners. This attracted business to the consultants but left the ordinary physicians with much less work and poor incomes. The result, as could have been anticipated, was ill feeling between the groups. The conflict was of such consequence that the *British Medical Journal* in 1872 was moved to comment entirely against the “great consultants,” who they believed should charge higher fees. This would decrease the burden of the overworked consultants and distribute the workload and the income in a more reasonable manner.

There was great fear among the general practitioners of sending their patients to consultants, because often these patients remained in the care of the more prestigious men whose care was considered better and whose fees were identical. Thus, the patients had no incentive to return to their practitioners. Therefore, in 1886, the Association of General Practitioners was established to try to regulate the relations between these opponents.

In the USA, meanwhile, another problem was developing. In the mid-1800s, many states repealed their laws regulating medicine, resulting in a large influx of quacks and cults. Because of this, a code of ethics restricting competition among doctors was adopted by the medical profession. This code condemned practitioners who did not have orthodox training, who claimed secret medications, and, importantly for consultants, who offered special abilities. (They may have actually had special abilities.) Although the code did much to discourage unqualified practitioners, as medical practice moved into the twentieth century, it allowed ill feeling to exist between general practitioners and a growing group of medical “specialists.”

A number of other negative results surfaced. Because the code forbade consultations with unlicensed physicians, if a patient insisted on a consultation with an outsider, the legitimate physician was forced to withdraw from the case, leaving the patient in the hands of these unqualified people. The rules also provided an opportunity for exclusion of even qualified physicians, and in the late 1800s, women, blacks, and those who were trying to specialize were at times subjected to these consultation bans.

In the twentieth century, laws have again been passed reducing the numbers of unqualified practitioners. The International Code of Ethics encourages consultation in difficult cases. The attainment of equal status by osteopathic physicians is an interesting sidelight to these ancient struggles to protect patients and the profession.

Today, the problem is entirely different. In previous centuries, consultation was requested from a physician who, although similarly trained, was thought to be more knowledgeable overall. Even 60 years ago, in “ uncomplicated” cases, consultation was generally considered unnecessary. The doctor who took care of the patient was the doctor who did the surgery, attended to preoperative and postoperative care, and continued to do the “primary care” long after.

For the past few decades, however, as medical knowledge has mushroomed and physicians have specialized and subspecialized, these tasks have been divided and subdivided. This division of labor has helped the great advances in medicine in the USA, but it also has created some special problems.

The proliferation in consultative medicine has allowed patients to have a large number of experts taking care of each separate part of an illness. The internist asks the cardiologist to consult on myocardial infarctions; the cardiologist asks the endocrinologist to consult on patients with diabetes; the surgeon asks the internist for help on patients with hypertension and congestive failure. Although this accumulation of expertise is impressive and would seem to lead to the best care possible, it can, and not infrequently does, lead to conflicting orders, incompatible medications, and conflicts between consulting physicians. Unfortunately, these conflicts are at times perceived by the patients and can cause unnecessary insecurity, fear, and anger.

These kinds of problems are common in the perisurgical patient who has complicating medical problems before surgery or who develops complications afterward. The surgeon frequently needs to have medical support to help with the complicated problems of preoperative and postoperative care. Unfortunately, the internist’s knowledge of the surgical procedures, the recovery course, and complications is often scanty. This sets up a situation in which each physician has knowledge that the other needs to take optimal care of the patient.

The advantages of the primary care physician, although they should be obvious, have been lost in the tangle of subspecialization. This physician can be either the internist or the surgeon. The important concept is that the responsibility for the integration of therapies falls to that one physician because he or she is most familiar with all aspects of the patient’s case. All other physicians must function as advisors (consultants) to the primary care provider.

The consultant’s role can be a difficult one. It is imperative that the primary physician be aware of, and approve of, all therapy, and therefore feel free to accept and reject the advice of the consultant. Rejection is, thankfully, an unusual occurrence. Under ideal circumstances, it is best for the consultant to discuss all recommendations with the primary physician before they are written in the chart. In this way, information can be exchanged, theories can be discussed, and a mutually satisfactory plan of treatment can be formulated. This avoids the confusion, anger, and mistakes that can occur when the consultant must institute therapy without discussion; this should be done only in an emergency situation, when delay would cause harm to the patient.

Another area of potential difficulty for the consultant is in discussing plans and diagnoses with patients who are
exquisitely sensitive to any discrepancy, real or perceived, between physicians. This can cause misunderstanding and anxiety for the patient, and can require an immense amount of explanation by the primary physician to reestablish the patient’s trust, to help him or her understand what is happening, and to allay his or her fears.

In general, it is best for the consultant to communicate treatment plans through the primary physician. When asked, the consultant can give the patient the broad outline of possibilities to be presented to the primary physician. The consultant should always make it clear that the final decision about what is to be done will be made by the primary physician and the patient.

There seem to be five basic principles behind optimal patient care. The first is the one-patient/one-doctor principle of primary care, or the “final common pathway” to integrate therapies as discussed above. Second, the primary doctor and consultant should trust each other. There needs to be a feeling between them that each one is able to provide something important to the patient’s care. Third, communication is indispensable. If the physicians take the time to talk to one another, confusion, irritation, anger, and mistakes can be avoided. The fourth principle is really a corollary of the third, and that is cooperation. It is the natural extension of communication: if two physicians can talk to each other and each one trusts the other’s judgment and knowledge, they will be able to cooperate, even in areas of disagreement, in taking the best care of the patient.

The final principle that ties the others together is etiquette. As in all human interactions, the way people deal with each other may be as important as the content of the interaction. A brilliant consultation, handled in a brusque and rude manner may be no more useful than no consultation at all. Controversial or optimal therapies begun before consultation with the primary physician will make further interaction difficult. Finally, and worst of all, improper therapy instituted erroneously or because of inadequate information not only will harm the physicians’ relationship but may harm the patient as well.

The art of consultation is one that involves many aspects of interaction. The primary physician and the patient must feel that the consultant is concerned not only with the hard scientific facts of the patient’s care from the specialist’s viewpoint but with optimal overall management. The request for consultation is not carte blanche for management; it is a request for advice in treating some part of the patient’s illness. Thus, the consultant should feel like an invited guest in someone’s house, not the master of ceremonies.