Purpose/Objectives: To describe a program of research related to outcomes of palliative surgery and focus on one phase of this research involving decision making by patients and surgeons considering surgery for advanced disease.

Design: Descriptive.

Sample: 10 patients undergoing surgery and 3 oncology surgeons.

Methods: Qualitative interviews were conducted with patients and their surgeons pre- and postoperatively. Transcripts were content analyzed to identify major themes in patient and surgeon interviews based on study questions.

Main Research Variables: Decision making, palliative surgery, quality of life.

Findings: The study findings highlight the issues of greatest concern to patients and surgeons considering palliative surgery. This phase was an important component of the overall program of palliative surgery research.

Conclusions: Comprehensive care for patients with advanced cancer seeks to achieve a balance of providing aggressive care, ensuring optimum symptom management, and maintaining a focus on comfort. Further study of palliative surgery as an aspect of interdisciplinary care is warranted.

Implications for Nursing: Patients undergoing surgery for advanced disease require expert nursing care to address quality-of-life concerns. Further research is needed in this area.

Treatment decisions in the case of incurable disease can be difficult for patients and the physicians who treat them. Basic tenets of palliative care deem that a frank discussion takes place regarding the risks and benefits of any treatment and that these options take into consideration each patient’s wishes. Perhaps in no aspect of palliative care is this more evident than for patients being considered for major palliative surgery, where risks often are greater than those faced from chemotherapy or radiation. Physicians may find difficulty in maintaining hope while effectively redirecting treatment goals from cure to symptom relief or quality of life (QOL). Better communication may translate into improved patient satisfaction, but how this is to take place and what patients want as part of the discussion are sources of considerable debate.

This article aims to contribute to an evolving understanding of decision-making and communication to improve patient care at the end of life. It describes a program of research in the area of palliative surgery and reports findings from one phase of that research. The purpose of this phase was to explore decision making by patients and surgeons considering surgery for advanced disease.
whereas some patients preferred to make treatment decisions alone. Less than 20% wanted to leave the decision making entirely to the physicians. However, other studies suggested that patients faced with a life-threatening disease do not necessarily want to make treatment decisions and would prefer a more passive role (Stiggellbout & Kiebert, 1997).

Braddock, Edwards, Hasenberg, Laidley, and Levinson (1999) documented the process of informed decision making between patients and their physicians, noting that only 9% of decisions met the definition of informed decision making and fewer than 10% included a discussion about treatment alternatives, risks, and uncertainties. Gattellari, Voigt, Butow, and Tattersal (2002) reported the extent to which patients with incurable cancer were able to make informed decisions about their treatment and explored the effect of information disclosure on patient well-being and satisfaction with their medical care. Although most patients were told about the aim of treatment, informed that their disease was incurable, and made aware of the uncertainty of whether treatment would achieve a benefit, few patients were explicitly offered a choice in their treatment and given time in the consultation to clarify their understanding.

Additional data suggest that patients with metastatic disease frequently may overestimate their survival time and that those who do so are more likely to favor life-extending treatment, perhaps without adequate understanding of the limitations of current available treatments to cure and without full knowledge of potential treatment-related side effects on QOL (Weeks et al., 1998). Reliable prognostic assessment assumes perhaps even greater importance in palliative care when patients may consider treatment-related morbidity if the likelihood of cure is remote given current treatment options. A number of studies have suggested that survival predictions of physicians are only moderately associated with survival (Maltoni et al., 1994).

Clinicians' primary obligation is to provide professional expertise in diagnosis and treatment of disease. Consequences of treatment, such as patient discomfort, associated treatment-related morbidity, or even mortality, may be viewed as acceptable risks when the goal of the treatment or surgery is cure. In the setting of a palliative intervention, however, the value of treatment outcomes relative to treatment risks is less well understood (Miner, Jaques, Tavaf-Motamen, & Shriver, 1999). Data regarding interventions for specific advanced malignant conditions are limited, and, thus, clinicians' knowledge base regarding outcomes may be limited.

Patients who are referred to surgeons after courses of chemotherapy or radiation have failed to contain their disease may feel desperate after having been informed that surgery is all that is left. Patients may not participate in active discussions about their options for care of symptoms when they anxiously hope and anticipate an offer of any anticancer treatment. In turn, surgeons may offer treatments to preserve patient hope. The fact that patients and physicians often avoid discussing prognosis in the case of incurable disease is well known, perhaps because frank palliative care discussions may uncover problems without solutions or are perceived as destroying any remaining hope for cure (Lo, Quill, & Tulsky, 1999).

The purpose of the current study was to allow for in-depth exploration and increased understanding of the complex process of decision making between surgeons and patients being evaluated for major surgery for treatment of advanced malignancy. To explore those issues in depth, qualitative interviews were conducted. This method of data collection allowed patients and surgeons the freedom to express their perspectives about decision making in the context of the social, cultural, and illness views that affect their decision-making process. This article reviews the expectations and methods of decision making of patients and their surgeons before and following a surgical intervention for advanced disease.

Methods

Conceptual Model and Program of Research

Figure 1 presents the conceptual model for decision making in palliative surgery that has evolved across the program of research described in Table 1. As depicted, decisions are influenced by patients, family, and the healthcare team. The process of making decisions involves identifying goals, recognizing values, acknowledging alternatives, and weighing risks and burdens. Treatment choices are made that result in patient outcomes that affect dimensions of QOL as well as additional outcomes. This study contributed to the conceptual model by refining patient and surgeon factors that influence decisions. The investigators will apply the model to future phases of this research program to include evaluation of the model in a patient intervention.

Sample

Patients were selected from a comprehensive cancer center if they met criteria of being aged 18 or older and were scheduled for surgery for advanced cancer. Advanced disease was defined as distant metastases, recurrent solid tumors, or initial presentation of suspected stage III or greater malignancy of particularly poor prognosis (e.g., esophageal, pancreatic, or gastric cancers). Patients were required to have a major operation, which was defined as involving general anesthesia and requiring an inpatient stay. Ten patients and their respective surgeons were interviewed. This included three surgeons across the 10 patients. Interviews were conducted preoperatively—generally one to three days before surgery—and approximately two to four weeks postoperatively. Interviews were tape-recorded, and the transcripts were prepared verbatim. A total of 556 single-spaced transcript pages resulted from the interviews. Key topics of the patient interviews are captured in Figure 2, and the topics of the surgeon interviews are identified in Figure 3.

Analysis

The interview guides were developed by the research team, pilot tested, and refined based on pilot interviews. Patient interviews were conducted by a research nurse, and physician interviews were conducted by a physician. Mock pilot interviews were conducted, tape-recorded, and reviewed by the team to provide feedback for interviewing. A research team comprised of two surgical oncologists and three nurses with extensive experience in qualitative methods analyzed the interviews, and the principal investigator listened to all tape-recorded interviews and reviewed all transcripts. Members of the entire research team read the transcripts and discussed their interpretations. Transcripts were analyzed using content analysis methods as described by Krippendorff (1980). Meaningful statements were bracketed from the transcripts and then assigned to tables using a “cut-and-paste” approach in which key themes and subthemes
were identified. Tables were reviewed and discussed by the research team during several meetings. The tables underwent numerous revisions based on team discussions.

**Results**

**Demographics**

Table 2 includes demographics of the patients and surgeons interviewed for the study. The mean age of the patients was 57, and frequently represented diagnoses were esophageal and colon cancer. Surgeons interviewed had a mean age of 48 years and had been in oncology practice an average of 15 years. Surgeons estimated their hours of palliative care education to be minimal.

**Patient Interviews**

In exploring the decision-making process, the investigators first sought to describe patients’ QOL to better understand the life circumstances that could contribute to patient decisions. Figure 4 lists patients’ descriptions of their QOL considerations before surgery in terms of physical, psychological, social, and spiritual well-being. In the area of physical well-being, patients described symptoms, including pain, nausea, fatigue, and multiple symptoms occurring together. The physical distress of symptoms associated with disease was the primary motivation for seeking surgical treatment. In the area of psychological well-being, patients described anxiety and coping mechanisms predominantly as they related to anticipating a future surgery. In the area of social well-being, patients described changes in their lives as a result of advancing disease, including strain on personal relationships and their employment status. Patients generally believed that, through symptom relief, surgery could remedy some of the social strain brought on by disease. The social impact of symptoms was a clear secondary motivation for surgery beyond the physical impact. In the area of spiritual well-being, patients commonly acknowledged their faith as an integral part of coping, especially to combat surgery-related anxiety, and they indicated an increased reliance on faith as their disease progressed. A need to maintain hope in the face of advancing disease by continuing to receive treatment emerged as another important motivation for surgery.

The interviews also directly explored patients’ decision-making processes regarding surgery for their advanced diseases (see Figure 5). Patients generally described the decision to have surgery as not a difficult one but rather as the only option at that point in their care, having exhausted other treatments such as chemotherapy and radiation. In general, patients were eager to pursue surgery rather than delay treatment. Consistent with the literature, although patients articulated their understanding of having advanced disease and often described how their surgeons had presented the operation as palliative in intent, most patients still hoped for the possibility of prolonged...
Table 1. Description of Program of Research of Palliative Surgery

<table>
<thead>
<tr>
<th>Phase</th>
<th>Study</th>
<th>Design</th>
<th>Key Findings</th>
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<tr>
<td>I</td>
<td>Surgical Palliation at a Cancer Center (Krouse et al., 2001)</td>
<td>Retrospective review of surgical cases (N = 1,915) during a one-year period with a one-year survival follow-up. This descriptive study began exploration of the extent of palliative surgery to identify patient outcomes.</td>
<td>Palliative surgeries comprised 240 (13%) of 1,915 surgical procedures (170 major and 70 minor). Neurosurgical (46%), orthopedic (31%), and thoracic (22%) surgical procedures frequently were palliative. The most common primary diagnoses were lung, colorectal, breast, and prostate cancers. Mean length of hospital stay was 12.4 days (range = 0–98 days). Mortality for surgical procedures classified as major was 22% and 10% for those classified as minor. The investigators concluded that significant numbers of palliative procedures causing mortality were high; however, a significant number of patients had short hospital stays and low morbidity. Palliative surgery should remain an important part of end-of-life care. Patients and their families must be aware of the high risks and understand the clear objectives of these procedures.</td>
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<td>II</td>
<td>Advancing the Evaluation of Palliative Surgery for Cancer Patients</td>
<td>Prospective review of palliative surgeons (N = 50). The interview guide was pilot tested for use with patients, family caregivers, and surgeons to explore decision making and goals.</td>
<td>Prospective design allowed expansion of outcomes to include quality of life (QOL) and to explore the involvement of family caregivers.</td>
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<td>III</td>
<td>Indications and Use of Palliative Surgery—Results of Society of</td>
<td>A survey (110 items) was mailed to members of the Society of Surgical Oncology (N = 419 responses). This phase was intended to provide a national perspective on the topic of palliative surgery and to expand knowledge of surgeons’ decision making.</td>
<td>Surgeons estimated that 21% of their cancer surgeries were palliative in nature. Forty-three percent of respondents believed that palliative surgery was best defined based on preoperative intent, 27% based on postoperative factors, and 30% on patient prognosis. Only 43% considered estimated patient survival time an important factor in defining palliative surgery, 22% considered considered survival time an important factor in defining palliative surgery, and 22% considered yearly survival rate important. Patient symptom relief and pain relief were identified as the two most important goals in palliative surgery, with increased survival the least important. On a scale of 1–7 (1 = uncommon to 7 = common), surgeons reported that the most common ethical dilemmas in palliative surgery were providing patients with honest information without destroying hope and preserving patient choice. On a scale of 1–7 (1 = not a barrier to 7 = severe barrier), surgeons rated the most severe barriers to optimum use of palliative surgery as limitations of managed care and referral to surgery by other specialists. They rated the least severe barriers to palliative surgery as surgeon avoidance of dying patients and surgery department reluctance to perform palliative surgery.</td>
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<td>IV</td>
<td>A Prospective Evaluation of Palliative Outcomes for Surgery of Advanced Malignancies (McCahill et al., 2003)</td>
<td>Prospective evaluation of patients undergoing palliative surgery (N = 59) with longitudinal measures for one year. Outcomes expanded to provide more detailed evaluation of symptom management and QOL. Qualitative evaluation included in-depth interviews with patients, family caregivers, and surgeons pre- and postoperatively to further describe decisions and outcomes related to surgery.</td>
<td>Preoperatively, surgeons identified 22 (37%) operations as palliative and 37 (63%) as curative. Thirty-three of 59 patients (56%) were symptomatic preoperatively, and symptom resolution was documented in 79% surviving more than 30 days. Good to excellent palliation, defined as more than 70% symptom-free nonhospitalized days relative to postoperative days of life, was achieved in 53% of patients categorized as palliative. Among patients with postoperative survival of less than six months, 63% had good to excellent palliation. The majority of patients who were symptomatic and undergoing major operations for advanced malignancies attained good to excellent symptom relief. Patient outcome measurements other than survival are feasible and likely to play a large role in defining surgery as an important component of multimodal palliative care.</td>
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<td>V</td>
<td>A Comparison of Resource Consumption in Curative and Palliative Surgery (Cullinane et al., in press)</td>
<td>Prospective evaluations of all surgeries during a three-month period (N = 319) with six-month follow-up. The investigators extended the outcomes of surgery to be evaluated based on phases I–IV.</td>
<td>The outcome and service needs of 302 consecutive patients with malignancies undergoing surgeon-defined curative or palliative surgery were analyzed over a four-month period. Previous treatment history, comorbidities, symptoms, procedures, outcomes, and use of supportive services were collected. Patients were followed for six months after the surgical procedures. Surgeries performed for cure were for breast or prostate cancer and for palliation were for breast, lung, and bone or soft-tissue tumors. Three (1%) curative and four (6%) palliative deaths occurred during surgical admission. Mean hospital stay was 5.1 days (range = 0–58 days) for curative and 1.9 days (range = 0–34 days) for palliative patients. Following discharge, a total of 4,690 encounters with the cancer center occurred, including 1,676 encounters with surgery, 1,595 encounters with medical oncology, 1,006 encounters with radiation oncology, 226 visits to medical specialists, and 187 visits to supportive services. Mean numbers of encounters for curative and palliative patients were 15 and 17, respectively (p = 0.41).</td>
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life with surgical treatment. For many patients, the surgery followed very extensive cancer treatment, often including chemotherapy and radiation and sometimes including multiple surgeries. Patients did not seem to believe that the risks of surgery were an important consideration in opting whether to have it, but rather considered that “all surgeries have risk.” Patients acknowledged having been informed of the risks of surgery, including the possibility of death or worsening symptoms. However, most believed that the risks were known and that their decision to proceed was deliberate and independent.

In the interviews conducted postoperatively, patients discussed their overall QOL after surgery, the decision to have the surgery, suggestions that they would make for others, and plans following hospital discharge and for the future. Figure 6 includes examples of patient experiences related to physical, psychological, social, and spiritual well-being. Again, although most patients clearly had been told that the surgical intent was palliative and the degree of success might vary, most patients still focused on the possibility of continued treatment and prolonged life. Following subtotal resection of the disease, one patient said, “I feel the surgery is not complete. I still have a tumor in my kidney.” Another described having “umpteen million brick walls thrown in my face” but planned to continue the battle against the disease. Patients commonly recognized that even symptoms that may have been effectively alleviated by surgery might return with future recurrent tumor growth. One patient described waiting for the “little time bombs” to go off in his body.

Patients frequently discussed the importance of having faith through the experience of surgery as well as for the future. One patient described God as guiding the surgeon. This time of illness was a time of reflection for patients. One patient described how “an unexamined life isn’t worth living” and that he had, in fact, examined his life. Others seemed to see...
surgery as a pivotal time in their illness, allowing them time to pause and consider life’s meaning and priorities.

Figure 7 includes some of the comments patients made in relation to their decision to have surgery. Patients seemed to generally affirm that the decision to have surgery had been a good choice and to recognize that, in most instances, surgery would give the physicians an opportunity to evaluate their advanced disease. Patients had a strong sense of “not giving up” and continued to search for traditional or alternative treatments that might lengthen life.

Surgeons’ Interviews

Figure 8 describes the key findings from the surgeons’ interviews conducted preoperatively. In general, surgeons described symptoms leading to the decision for an operation and the goal for symptom relief. They described the importance of helping patients understand surgical options and, as reflected in the literature, the challenge of maintaining hope while being realistic and honest in communicating the goals as palliative rather than curative in nature.

When discussing decision making regarding code status of patients, surgeons were conflicted between avoiding resuscitation because of the patient’s advanced disease while recognizing possible need for resuscitation in the situation of potentially
Surgery-Only Option
Because this is one of the slower—slower growing cancers, radiation and chemo wouldn't have helped at all. So, there was—there was no option other than—other than the surgery—there was no option.

Cure or Palliation
At least I’ll have a chance of being cancer free. . . . Well, somewhat cancer free for a while before the next bombardment, since it’s obviously—it’s obviously a virus that I can’t fight off. My immune system’s been so compromised over the years that it’s obviously one that I can’t fight.

Increased Length of Survival
My understanding is just to slow it down, because it’s all the way through my lymph system already. That means it’s already metastasized. I’ll guess we do the surgery and then I’ll do treatment again. And then, if my body can withstand it, then I’ll do the last series and probably just have my CAT scans and wait for it to pop up. That’s my understanding. What they told me is I won’t be in remission again. I’m in what’s called a transition, and, um, so it just depends on how my body continues the transition—how fast or how slow it goes.

Accepts Risk
I don’t see much risk. But I will accept the risk if there is a risk. Because that’s, that’s a condition. They will give me surgery; you got to accept the risks. So, in my previous experience, it was very easy to remove. You open, then you take tumor. So, I know there always was a risk, but I, I don’t worry.

Risk of Death
It might have been me. [Laughs] That I could have died. You know I could die. They could go in, and I could die, right then and there.

Risk of Complications
If my, if my heart doesn’t stop, if I don’t internally hemorrhage, my lung doesn’t collapse, they don’t inadvertently paralyze me, ah, yeah, it—I have—I have pretty good odds. I think that they originally started out as 60/40 but I—I think they bumped them up a little so I have pretty good odds of surviving it. But you do have to—you have to live with those problems, all the excess baggage.

Self-Directed Decision
No, I, when I was evolving with all of this and watching Moyer [television special on death] and everything like that, I knew that no one else could do this. I think, I say don’t worry. We already have the problem. You got to face it. Your worry only makes it worse. You know, if you put a lot of energy into worrying, it’s just not going to be as bad. You know, I don’t think there was anything left. I mean, when I came here for that surgery, [the doctor] did, when he got in there and saw what he was faced with, I’m sure he saw that part. Um. Unexpected, um. Maybe just the way the pain was. Thought it was going to be different than it was. And then how he told me how it was going to be, it was different than that. But, um, no. Not really. Just the worries that if it’s done correctly, I guess, but I guess that will show itself.

Psychological Well-Being
But now I feel even the surgery’s not complete. I still have a tumor in my kidney. But that is not operable based on what [the doctor] told me. Just, just a few alternatives. You know, it’s a surgery, remove the whole kidney? Or do the gene therapy? Or do the freezing or burn technique, you know. So there’s still a chance.

Spiritual Well-Being
It’s, ah, I realize my days are numbered, you know. But, ah, and if, if I’m going to be in misery, I don’t even want to be here. You know if, if, if they can, I’m sure that’s what they’re trying to do is make me comfortable. And, ah, and that’s fine with me. I, ah, ah, you know, if I can go out and do a little bit of this and a little bit of that, and, ah, go watch my granddaughters play softball, what more? [Laughs]

Figure 6. Patient Postsurgery Quality of Life

Well, you know, this is really, it’s difficult to answer because now [the doctor] has been in there and he has seen what is there. So, now, is it a question: Would I have another surgery, well really and truly knowing what [the doctor] knows, and he is the surgeon, would he perform another surgery? Yeah, I probably would. I think I probably would. ‘Cause if you don’t, if you don’t do something, you’re not going to get anything, you know. And, I put the faith in the doctors. I mean, the tumor in the lungs is supposed to disappear. . . . The ones on the lymph nodes is, is practically gone. The tumor that’s on the liver is, is reduced significantly. So, he knows what he’s doing. Yeah. So, no, I feel that [the doctor] did, when he got in there and saw what he was faced with, I’m sure that he did everything within his ability to help me.

I don’t think there was anything left. I mean, when I came here for that surgery, it was the end to me. I needed to take care of what needed to be taken care of or I just didn’t want to go on, really. I haven’t eaten right for three years, and when you spend all that time, you know, just having stuff go down your throat and pour it out a hole and burn your skin. . . . It’s just terrible. There’s a place that you know it’s over, you can’t stand it anymore.

Yeah. Every time my friend, or whoever, has cancer, I told them don’t give up. Try your best. Find an alternative. If you’re rejected by this doctor, don’t just give up. Keep on trying whatever possible, whatever you have to go through. So, that’s the only way. A lot of my friends are cancer patients. When they come to the end of the tunnel, they don’t know how to do and they are so depressed, I say don’t worry. We already have the problem. You got to face it. Your worry doesn’t help. You know, you got to ask God to give you a day. Use the medical technology available. . . . Somebody may save you. You know, a miracle. This could happen to you, too. It happened to me many times. And I do see something like this not just happen to me, happen to other people.

Figure 7. Patient Postsurgery Quality of Life
Symptoms Leading to Surgery
Drainage. Through the rectum. That he cannot control. He says it bothers him a lot all the time. He said it was a real burden over the Christmas and New Year’s holidays. So, I think it, it interferes with him socially just because of the drainage and the lack of control and the fact that he just can’t get comfortable.

Goals of Surgery
The major goal is cure. So, not only is it good in the sense of increasing survival, but it is also very good in decreasing symptoms such as swallowing and pain. So, although it does not affect the metastatic disease, obviously, it does affect quality of life, and most patients that undergo surgery eat the entire period until they die. And that is a major advantage of surgery. It has to be done with a low morbidity. If you have a high morbidity, then all the benefit of surgery is gone.

Patient Decisions Regarding Surgery
I don’t think they [patient and family], they think of it as a curative, but I do think that they think that his life will be prolonged. They know that it’s going to recur again, but they think if you can prolong the time between recurrences to one to two years, his chance will be better. And I think there’s also that, ah, element of hope that a new drug may be developed or a new form of treatment. I don’t think they’re grasping at straws, but I think there is that, that element of hope.

Discontinuing Treatment or Code Status
I don’t discuss code status, because I think this guy has a year to live. I think he’s made the investment. He’s made the commitment to go through a painful surgical procedure. . . . It’s a big investment on the part of the patient. And I think he’s made a decision that he’s not ready to give up. And to me the DNR [do-not-resuscitate order] is a give-up. So, if he had a cardiac event during the operation, I wouldn’t stop the operation. I’d try to deal with the cardiac event. If two days after a successful palliative procedure, he was still comatose and, um, had, ah, cardiac output of one, secondary to a myocardial infarction, then, then I would want to make that decision.

Risks Involved With Surgery
He has 30% three-year survival with chemo-radiation, but the five-year survival is less than 5%. Most patients die before the third year—70% of them die before. But, basically, there are virtually no patients that survive past five years with chemo-radiation alone. The combination of chemo-radiation followed by surgery achieves about 30% long-term survivors. And I think in, in young patients like this one, without significant additional morbidity that might be dying off, this is a rational treatment, and the patient understands those options and selected the most aggressive treatment, understanding that the risk is 5% mortality up front.

Physician Communication With the Patient
He had an excellent understanding of what we’re going to do. I think he’s probably more optimistic than I would tell him to be about just the complete nature of doing this. He doesn’t completely understand his disease, but he understands the operation. He understands the goals of the operation, and he does know what the limitations are. But I think he’s still very optimistic. A better outcome from his disease as a whole. He knows that, absolutely. He knows that this will define the fact that he will never be put back together.

Figure 8. Surgeon Comments Presurgery
Survival time of the patient. In his example, he considered surgery that was anticipated to require minimal postoperative hospitalization time to be justified even if the patient had anticipated short survival time, but he considered it unjustified to perform surgery with prolonged postoperative hospitalization and recovery periods if the remaining life span was short.

Discussion
The investigators believe that this study contributes to an understanding of palliative care by exploring patient and sur-

geon decision making in advanced disease. This qualitative study is one component of a program of research in the area of palliative surgery that began in 1999. To date, this research has included retrospective and prospective evaluation of the use of palliative surgery in a cancer center (Krouse et al., 2001), a national survey of surgical oncologists (McCahill et al., 2002a, 2002b), a study of QOL and symptom outcomes of palliative surgery, and an exploration of family caregiver perspectives surrounding surgery (Borneman et al., 2003). This study of patient and surgeon decision making contributes to this program of research by sharing subjective information and adds to the understanding of QOL factors in this population.

The study findings indicate that the physical impact of uncontrolled symptoms is the primary motivation to consider palliative surgery but that the social impact of these symptoms and the need to maintain hope also factor heavily. Thus, as future investigators evaluate palliative treatments, these outcomes are important to consider. Study findings also revealed that patients often held on to hope for cure even when they had been given information about the palliative intent of surgery. Patients generally considered surgery as the only option and saw surgical risks as inherent and not major influences in decision making. They believed that the decision to pursue surgery was made deliberately and independently by themselves, and they relied on faith to cope with the possibility of a negative outcome. Postoperatively, patients generally regarded surgery as the right choice because it served as a source of hope and gave them needed time for reflection.

An important methodologic note is that the investigators found that the two-week time period between surgery and the

Status of Patient
Postoperatively, the mucus discharge was markedly reduced. That was successful. The patient has a lot less pelvic pain in general, maybe due to a partial obstruction from the tumor in that area, even though he had been already diverted. And early on he had better spirits and was eating a little bit more. I told him that likely we would help at least the mucus discharge, but maybe not the pelvic pain. In general, he felt better at least early on. And, in fact, it helped the pelvic pain also, so he was happy with that.

Surgery Effectiveness
He wasn’t in the hope of having normal bowel function. He was just in hopes of removing the side effects of the tumor being present in the rectum and bowel. So, if it’s three months now postoperative for the palliation for the pain and for the mucus discharge, I’m satisfied. So, for one week in the hospital, that was rational. . . . And he’s not only exceeded the three months, he’s also gotten very good palliation for the specific symptoms that were addressed.

It’s a question of how long it takes the patient to have the surgical palliation and recover from it to how long they are going to survive. So, if it’s a 30-minute operation of removing that critical symptom and they die in three weeks, I’m okay with that. And if they die from progressive disease elsewhere three weeks later, I have no problem with that. If it requires one week of hospitalization. . . . An operation and one week of hospitalization, and the patient dies of their progressive disease three weeks later, I think that’s unacceptable. So, there is some rationale there.

Communication
I met with [the patient’s wife] on Thursday, spent an hour with her, going over all the issues, tried to help her deal with the loss of her husband. I usually do that. I invite my patient’s family to come back and meet with me as many times as they need, because I think if you understand what went wrong, it doesn’t bring people back, but at least you don’t leave questions unanswered.

Figure 9. Surgeon Comments Postsurgery
postoperative interview was too brief to fully assess symptoms and the physical impact of surgery. Future phases of this research will delay postoperative follow-up to better capture patient outcomes. The investigators were impressed by the resolve of patients to keep fighting their advanced disease and their continued hope for extended life. These findings were important indicators of the need to understand patient perspectives of treatment options and the need for palliative care concurrent with active treatment of disease.

The surgeon interviews provided important perspectives about their roles in decision making and illustrated the importance of the interdisciplinary approach to care in advanced disease. Surgeons conveyed that the need to balance the risk of surgery with the physical and temporal benefit was foremost in their recommendations to patients. However, they were challenged frequently to maintain patients’ hope while trying to communicate an honest assessment of patients’ status. All surgeons emphasized the importance of ensuring that patients and their families have a clear understanding of the options available, although they did have some reluctance to discuss patient code status. Frequently, surgeons described the surgical outcomes as somewhat poorer than originally expected.

The surgeon interviews illustrated the commitment of these physicians to patient comfort, QOL, and maintaining hope amidst advanced disease. The nurse investigators were impressed by the evident compassion expressed by the surgeons and their difficult challenges in making treatment decisions.

**Conclusion**

Comprehensive care for patients with advanced cancer seeks to achieve a balance of providing aggressive care, ensuring optimal symptom management, and maintaining a focus on comfort. Recent literature has explored the role of chemotherapy or radiation therapy with less emphasis on palliative surgery. This qualitative study is a component of a larger, longitudinal program of research that hopes to advance the understanding of the role of surgery in palliative care. Study findings helped to advance the conceptual model and provided direction for future intervention.

Patients with cancer undergoing surgery may be viewed in an acute care focus with attention given to physical needs. This study illustrates the comprehensive needs of surgical patients encompassing physical, psychological, social, and spiritual well-being. These findings also indicate the importance of coordinated interdisciplinary care in surgical oncology.

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