

# Education, Training, and Certification in Palliative Surgery and Surgical Palliative Care

Andrew S Barbas and Sabino Zani\*

Department of Surgery, Duke University, Durham, NC, USA

## Abstract

The primary goal of surgical palliative care is to relieve suffering and enhance quality of life for terminally ill patients through the judicious use of palliative procedures. Certification in surgical palliative care can be attained through completion of formalized Hospice and Palliative Medicine fellowship training. Although most surgeons do not complete such training, the principles central to surgical palliative care are highly relevant to any practicing surgeon. The American College of Surgeons has developed several educational initiatives aimed at enhancing competency in surgical palliative care. In practice, surgical oncologists and trauma/critical care surgeons are at the forefront of surgical palliative care, frequently caring for patients with terminal conditions in complex end-of-life clinical settings. As the elderly population in the United States expands, there is a growing need for all surgeons to develop greater clinical competency in surgical palliative care principles.

**Keywords:** Palliative surgery; Palliative care; Critical care

## Introduction

Surgical palliative care is defined as “the treatment of suffering and the promotion of quality of life for patients who are seriously or terminally ill under surgical care” [1]. The performance of palliative surgery, defined as “a surgical procedure used with the primary intention of improving quality of life or relieving symptoms caused by advanced disease” can be an effective tool to directly palliate patient symptoms in a variety of clinical settings [2]. The efficacy of a palliative procedure is judged primarily by how well it ameliorates symptoms from the patient’s perspective, rather than by traditional parameters of surgical success. In many ways, surgeons have been involved in palliative care since the inception of surgical practice. Prior to the development of modern medical technology in the 20<sup>th</sup> century and the accompanying shift in focus on curative and reconstructive procedures, the bulk of early surgical practice consisted of performing procedures aimed at relieving suffering in a variety of settings [3]. Examples include amputations following severe injury to an extremity and the removal of disfiguring and painful tumors.

## Formalized Training in Surgical Palliative Care

Surgical palliative care falls under the larger umbrella of palliative medicine, which was first recognized as a medical specialty in the United Kingdom in 1987. In the United States, the development and growth of palliative medicine began in the late 1980s with the formation of the Academy of Hospice Physicians, now known as the American Academy of Hospice and Palliative Medicine. In 2006, Hospice and Palliative Medicine was established as an official subspecialty by the American Board of Medical Specialties (ABMS) and the Accreditation Council for Graduate Medical Education (ACGME). Several ABMS boards including The American Board of Surgery were approved to grant certification in Hospice and Palliative Medicine, and in 2008 the first certifying exam was administered. Currently, there are 73 ACGME-accredited fellowship programs in Hospice and Palliative Medicine. As of October 2012, only those physicians who have completed a fellowship from one of these accredited programs will be eligible to take the ABMS certification examination [2]. In today’s training paradigm, it is relatively uncommon for surgical residents to pursue a dedicated fellowship in Hospice and Palliative Medicine, which ultimately means few surgeons, will receive official ABMS certification in the future.

## Educational Initiatives in Surgical Palliative Care

Nevertheless, the guiding principles that form the foundation of

surgical palliative care are relevant for any practicing surgeon, and thus it is critical that surgeons familiarize themselves with these concepts and engage as active participants in multidisciplinary care along with palliative care specialists. The American College of Surgeons has taken a leadership role in the recognition of the importance of surgical palliative care in modern surgical practice and has established several educational initiatives aimed at surgical residents and practicing surgeons. In 2005, the ACS Surgical Palliative Care Task Force released its “Statement of Principles of Palliative Care” which highlights several key principles regarding the care of surgical patients in palliative settings [4]. Central to this statement is a focus on respecting the dignity and autonomy of patients and their families as well as establishing effective and empathetic communication to identify the primary goals of care from the patient and family perspective. Other core principles are listed in table 1. Additionally, the ACS has established a set of core competencies that surgeons should strive to master pertaining to surgical palliative care [5]. These are grouped under the dimensions of patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and systems based practice (Table 2). In terms of resident initiatives, in 2009 the ACS established teaching modules aimed at improving the competency of surgical residents in a variety of subjects pertinent to the arena of surgical palliative care [6]. Modules included in this work include the surgeon-patient relationship, pain, dyspnea, delirium, depression, malignant bowel obstruction, cachexia, delivering bad news, and conducting a family conference, among several others (Table 3).

## Surgical Palliative Care in Practice

As the U. S. elderly population grows, the performance of palliative surgery near the end of life will likely become more commonplace.

\*Corresponding author: Sabino Zani, Department of Surgery, Duke University Medical Center, USA, Tel: 919-452-5410; E-mail: [sabino.zani@duke.edu](mailto:sabino.zani@duke.edu)

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American College of Surgeons Statement of Principles of Palliative Care
Respect the dignity and autonomy of patients, patients' surrogates, and caregivers.
Honor the right of the competent patient or surrogate to choose among treatments, including those that may or may not prolong life.
Communicate effectively and empathetically with patients, their families, and caregivers.
Identify the primary goals of care from the patient's perspective and address how the surgeon's care can achieve the patient's objectives.
Strive to alleviate pain and other burdensome physical and nonphysical symptoms.
Recognize, assess, discuss, and offer access to services for psychological, social, and spiritual issues.
Provide access to therapeutic support, encompassing the spectrum from life-prolonging treatments through hospice care, when they can realistically be expected to improve the quality of life as perceived by the patient.
Recognize the physician's responsibility to discourage treatments that are unlikely to achieve the patient's goals and encourage patients and families to consider hospice care when the prognosis for survival is likely to be less than a half-year.
Arrange for continuity of care by the patient's primary or specialist physician, alleviating the sense of abandonment patients may feel when "curative" therapies are no longer useful.
Maintain a collegial and supportive attitude toward others entrusted with care of the patient.

Table 1: American College of Surgeons -statement of principles of palliative care.

<p><b>Patient Care</b></p> <ol style="list-style-type: none"> <li>1. Possess the capacity to guide transition from curative and palliative goals of treatment to palliative goals alone based on patient information and preferences, scientific and outcomes evidence, and sound clinical judgment.</li> <li>2. Perform an assessment and gather essential clinical information about symptoms, pain, and suffering.</li> <li>3. Perform palliative procedures competently and with sound judgment to meet patient goals of care at the end of life</li> <li>4. Provide management of pain and other symptoms to alleviate suffering.</li> <li>5. Communicate effectively and compassionately bad news and poor prognoses.</li> <li>6. Conduct a patient and family meeting regarding advance directives and end-of-life decisions.</li> <li>7. Exercise sound clinical judgment and skill in the withdrawal and withholding of life support.</li> </ol>
<p><b>Medical knowledge</b></p> <ol style="list-style-type: none"> <li>1. Acute and chronic pain management.</li> <li>2. No-pain symptom management.</li> <li>3. Ethical and legal basis for advance directives, informed consent, withdrawal and withholding of life support, and futility.</li> <li>4. Grief and bereavement in surgical illness.</li> <li>5. Quality of life outcomes and prognostication.</li> <li>6. Role of spirituality at the end of life.</li> </ol>
<p><b>Practice-based learning and improvement</b></p> <ol style="list-style-type: none"> <li>1. Recognize quality of life and quality of death and dying outcomes as important components of the morbidity and mortality review process.</li> <li>2. Understand their measurement and integration into peer review process and quality improvement of practice.</li> <li>3. Be skilled in the use of introspection and self-monitoring for practice improvement.</li> </ol>
<p><b>Interpersonal and communication skills</b></p> <ol style="list-style-type: none"> <li>1. Surgeons must be competent and compassionate communicators with patients, families, and health care providers. They should be effective in communicating bad news and prognosis and in redefining hope in the context of cultural diversity. The interdisciplinary nature of palliative care requires that the surgeon is skilled as a leader and a member of an interdisciplinary team and maintains collegial relationships with other health care providers.</li> </ol>
<p><b>Professionalism</b></p> <ol style="list-style-type: none"> <li>1. Surgeons must maintain professional commitment to ethical and empathetic care, which is patient focused, with equal attention to relief of suffering along with curative therapy. Respect and compassion for cultural diversity, gender, and disability is particularly important around rituals and bereavement at the end of life. Maintenance of ethical standards in the withholding and withdrawal of life support is essential.</li> </ol>
<p><b>Systems based practice</b></p> <ol style="list-style-type: none"> <li>1. Surgeons must be aware and informed of the multiple components of the health care system that provide palliative and end-of-life care. Surgeons should be knowledgeable and willing to refer patients to hospice, palliative care consultation, pain management, pastoral care, social services, etc. and understand resource utilization and reimbursement issues involved.</li> </ol>

Table 2: American College of Surgeons-Core competencies in surgical palliative care.

Kwok and colleagues examined patterns of surgical care in elderly Medicare beneficiaries during the last year of life and found that 32% of this population underwent an inpatient surgical procedure in the year before death, 18% in the last month of life, and 8% in the last week of life [7]. These patterns varied with patient age and region, but nevertheless demonstrate a high frequency of surgical intervention for a variety of causes near the end of life. Within surgical disciplines, surgical oncology and trauma/critical care specialists frequently encounter complex and challenging patient scenarios in which surgical palliative care issues are highly relevant.

### Surgical oncology

Surgical oncologists are at the forefront of surgical palliative care, frequently encountering patients with advanced malignancies who are in need of surgical palliation for control of symptoms arising from obstruction, perforation, or bleeding. Common scenarios include patients with malignant small bowel obstruction from advanced gastrointestinal malignancies or obstructive jaundice from advanced

hepatopancreaticobiliary malignancies. In a study by Krouse et al. [8], palliative surgical procedures make up a significant proportion (12.5%) of all surgical cases performed in patients with cancer. Undoubtedly, these patients can present significant challenges due to the complexity of their disease processes as well as associated deconditioning and decline in functional status. Performance of palliative surgery in such patients is associated with significant morbidity and mortality, making frank discussion regarding the potential risks and benefits of an intervention and establishing realistic expectations with the patient and family of paramount importance. In a study conducted by Miner et al. [9] at Memorial Sloan Kettering Cancer Center, palliative procedures were associated with a mortality rate of 10% and morbidity rate of 40%, but also demonstrated a high rate of success, with 80% of patients achieving symptom resolution. Optimizing patient selection and the timing of intervention are also important considerations in these procedures, and these parameters have not yet been clearly defined. Major challenges in the study of outcomes following palliative surgery in cancer patients include the limited survival that many of

Resident educational modules, surgical palliative care
Personal awareness, self-care, and the surgeon-patient relationship
Pain
Dyspnea
Delirium
Depression
Nausea
Constipation
Malignant bowel obstruction
Cachexia, anorexia, asthenia, fatigue (wasting syndromes)
Artificial nutrition and hydration
Palliative surgery: definition, principles, outcome assessment
Pediatric palliative care
Cross-cultural encounters
Delivering bad news
Goals of care/conducting a family conference
The do-not-resuscitate discussion
Palliative and hospice care referrals
Care during the final days of life
Discussing spiritual issues: maintaining hope

**Table 3:** American College of Surgeons-Resident educational modules, surgical palliative care.

these patients experience following intervention as well as the lack of consensus regarding the assessment tools that should be employed to measure the success of an intervention. A study by Badgwell et al. [10] highlighted the challenge of studying outcomes in palliative surgery for cancer patients, in which 25% of patients with incurable malignancies undergoing palliative surgical procedures died within 1 month of the procedure. When considering what defines “success” in palliative surgery, traditionally used objective parameters including disease-free and overall survival are irrelevant. Instead, subjective measures of patient satisfaction and quality of life assessment form the foundation of a successful intervention, but there is no consensus on the optimal method of evaluation.

### Trauma/Critical care

Surgical palliative care also has great relevance in the intensive care setting. Whether caring for critically injured trauma patients or those suffering serious illness following a surgical intervention, intensivists are frequently confronted with difficult decisions regarding the optimal management of patients with unsurvivable conditions. The adoption of palliative care practices in the ICU setting is becoming more commonplace, particularly as palliative care consultants are increasingly available at hospitals across the country. These teams can facilitate discussion between families and the ICU teams regarding emotionally-charged issues such as the establishment of “do-not-resuscitate” orders and the process of withdrawal of support. In both ICU and trauma care, practitioners are becoming more cognizant of the importance of open and empathetic communication with the patient and family as a key element for improving end-of-life care. In 2008, the American Academy of Critical Care Medicine published a consensus statement with recommendations for end-of-life care in the ICU which highlighted the importance of intensivist comfort with family communication, withdrawal of support, and the appropriate use of analgesics and sedatives in improving patient comfort [11]. In

trauma care, surgeons have established guidelines for best practices for effective communication with families of the victim [12]. Several studies have examined the utilization of intensive-care resources at the end of life, and increasing evidence demonstrates that the adoption of palliative care practices may help decrease ICU length of stay and resource utilization in futile clinical circumstances [13,14].

### Conclusion

Developing competency in the principles of surgical palliative care is critical for any practicing surgeon, regardless of specialty or practice setting. The aging population and changing healthcare landscape in the United States will undoubtedly highlight the importance of these principles in the coming years. While formal avenues for training exist in the form of a fellowship in hospice and palliative medicine, there are a number of additional educational initiatives spearheaded by the American College of Surgeons that are available and relevant to all practicing surgeons.

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