The Intersection of Palliative Care and Interventional Radiology: Enhancing Understanding and Collaboration

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Abstract

Keywords

- palliative care
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In the treatment of cancer patients, many interventional radiologic procedures are palliative in nature. The goal for these therapies is often something other than cure, such as prolonged survival or improved quality of life. The goals of therapy should be matched with the patient's wishes, and must include open communication between the health care provider and the patient. Hospice and palliative medicine is its own specialty, and a multidisciplinary approach to the care of cancer patients should include discussions with these health care specialists. This article will briefly define palliative care in general, describe the specialty of hospice and palliative medicine, and discuss how hospice differs from palliative care. Finally, it will highlight opportunities for interventional radiology specialists to incorporate more deliberately palliative care skills and competencies into their own practice and to collaborate with palliative care specialists.

Objectives: Upon completion of this article, the reader will be able to discuss the specialty of hospice and palliative care, and explain the role of this specialty in the interventional radiology cancer population.

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Interventional radiology (IR) is a specialty focused on finding means to perform diagnostic and therapeutic procedures in a manner that minimizes potential toxicity and recovery for patients. Insofar as IR tilts the balance for patients toward a more rapid recovery and/or an improved quality of life, it is intrinsically palliative in nature. At face value, the terms “interventional” and “palliative” may appear to be antonyms. However, a closer look at the minimally invasive approach and many of the common procedures performed by IR specialists uncovers numerous ways in which IR can truly be a key component of palliative care for many patients. This article will briefly define palliative care in general, describe the specialty of hospice and palliative medicine, and discuss how hospice differs from palliative care. Finally, it will highlight opportunities for IR specialists to incorporate more deliberately palliative care

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skills and competencies into their own practice and to collaborate with palliative care specialists.

Defining Palliative Care

To palliate means to ease. The term “palliative” is often used to describe a treatment that is noncurative in its intent, such as palliative chemotherapy or a “palliative” gastrostomy tube. Thus, palliative care is care that aims to ease the burden of disease for an individual rather than cure their disease. Defined in this broad sense, palliative care is a component of care provided by all clinicians. The field of palliative care has grown immensely in the past two decades. In 2006, the American Board of Medical Specialties approved the field of hospice and palliative medicine (HPM) as an official subspecialty. This designation was a collaborative process that was sponsored by 10 boards including the American Board of Radiology.¹ The multitude, number and span, of the disciplines that sponsored this designation is recognition of how the discipline of HPM is intertwined in the work of clinicians of every specialty.

According to the Center for Advancement of Palliative Care (CAPC), palliative medicine is defined as “specialized medical care for patients with serious illness, aimed at enhancing quality of life for both patients and families. It focuses on relieving the symptoms and stress of a serious illness, regardless of the diagnosis.”² A comprehensive concept of quality of life includes physical, psychological, social, and spiritual aspects of a patient’s experience. No one individual or discipline can fully address all of these, so comprehensive palliative care requires an interdisciplinary team. Specialty palliative care teams often include physicians, nurses, nurse practitioners, social workers, and chaplains. Some palliative care teams also have pharmacists, dietitians, and psychologists. Team members work together to help patients and family caregivers to live as well as possible in the context of a serious, life-threatening illness. Practically, this means managing physical symptoms, such as pain, nausea, dyspnea, anorexia, and delirium. Reducing symptom burden enhances function and quality of life. Psychological distress and feelings of worry or sadness are common after learning that one has a life-threatening illness; however, a diagnosis of anxiety or major depression should not be an expected consequence of living with a serious illness. For example, among patients with advanced non-small cell lung cancer, only 14% met criteria for major depressive disorder.³ Whether patients meet criteria for major depression or anxiety disorder or are just struggling to adjust to their diagnosis, social workers and chaplains can support patients and family members, counsel them and help find resources to support them in their community and home. Finally, palliative care teams can help ensure that patients have accurate understanding of their overall prognosis⁴ and help them make informed choices about the various treatment options. In the context of incurable cancer, patients routinely overestimate their prognosis and the expected outcomes of treatment.⁵ At the same time, patients want to know their prognosis, expect their clinician team to inform them of this, and make

different decisions about care if they realize their expected survival is shorter—with more patients opting for a less aggressive approach to care.^{4,6–10}

Specialty palliative care teams can help with all of these domains through expert symptom management, psychospiritual support, and facilitation of informed decisions regarding medical treatments and interventions. However, done best, all clinicians involved in a patient’s care are incorporating palliative care into their practice by addressing physical and psychological symptoms and careful discussion of risks and benefits for various treatments. The palliative care practice of non-HPM specialists is often called “primary palliative care.”

The Timing of Palliative Care—Earlier Is Better

A recent survey conducted by the CAPC found that 70% of Americans were “not at all knowledgeable” about palliative care. Even more concerning was the finding that most health care professionals believe palliative care is synonymous with end-of-life care.¹¹ Clinicians’ erroneous understanding that palliative care is only appropriate at the end of life means the patients and families are deprived of the benefits of palliative care until late in their course. This is concerning in light of increasingly robust literature that demonstrates benefits of early integration of palliative care. Several randomized, controlled clinical trials compare integration of specialty palliative care to standard care. These trials demonstrate improvements in quality of life, symptom burden, patient’s and caregiver’s satisfaction, and reduction in health care utilization at the end of life.^{12–16} Two of these trials found that patients on the early palliative care arm lived longer.^{17,18}

Despite the strong evidence of the benefits of integrating palliative care earlier in the course of a serious illness, many patients are not referred to palliative care until late in their illness, if at all. Several factors contribute to delayed referrals to palliative care. First, many clinicians mistakenly perceive palliative care as appropriate only after all disease-modifying therapies have been exhausted.¹⁹ In fact, most palliative care specialists prefer to meet patients while they are still being treated for their underlying disease. Careful assessment and management of symptoms may actually allow some patients to tolerate disease treatment for longer. Second, many patients and families mistakenly equate palliative care and hospice. Finally, the shortage of palliative care specialists means that access to care can be limited.²⁰ All of these factors argue for the importance of having non-HPM clinicians incorporating palliative care skills into their own practice.

► **Fig. 1** shows the appropriate timing for palliative care intervention.

Distinguishing Palliative Care and Hospice

While there are similarities, the terms hospice and palliative care should not be used interchangeably. Hospice has

Fig. 1 Appropriate timing for intervention of palliative care, maximizing palliative care in maximizing a quality of life model. (American Academy of Hospice Palliative Medicine, Center to Advance Palliative Care. National Consensus Project for Quality Palliative Care: Clinical Practice Guidelines for quality palliative care, executive summary. *J Palliat Med* 2004;7(5):611–627.)

particular limits that do not apply to palliative care. To qualify for hospice, patients must have a life expectancy of less than 6 months, whereas palliative care can be offered to anyone with a serious illness, regardless of prognosis.²¹ The nature of the hospice benefit also generally requires that patients on hospice care receive only medical care focused on comfort, not disease-directed care (e.g., chemotherapy for patients with cancer), though some hospices will allow patients to continue such treatments that are palliative in intent. In contrast to hospice, palliative care is routinely provided alongside therapy aimed at altering the disease course. Although palliative care teams are most commonly found in hospitals and increasingly expanding into the ambulatory area, most hospice (96%) is delivered in a patients' home.²²

Hospice is primarily designed to help patients who are approaching the end of life maintain comfort and remain in their own home for the final phase of life. Hospice teams, composed of nurses, social workers, home health aides, and chaplains, work with the patient's primary physician to deliver the necessary care in the patient's home. For example, hospice will deliver durable medical equipment, such as supplemental oxygen, a commode, and a hospital bed to the home. For patients with catheters in place to drain pleural, peritoneal, or bile, the hospice team can help set up necessary equipment (e.g., suction system for a venting gastrostomy tube) and assist the patient and family in managing the apparatus and applying dressings to the insertion site, if appropriate. The hospice medical benefit also covers the cost of medications and delivers these medications to the home, including schedule II analgesics. In-home assessment of the patient often enables titration of these medications to achieve symptom relief. While the hospice team members do not provide in-home around-the-clock care, they are available to patients and family members 24 hours a day, 7 days a week by phone. When a patient develops an acute change in status outside of regular business hours, the family can reach out to the hospice team and someone will come to the home. This service is critical to

allowing patients to remain at home and help avoid the emergency room or hospitalization.

Uncommonly, routine home hospice care cannot meet a patient's needs. Such patients may benefit from using one of the other three levels of hospice care, which includes inpatient respite care, continuous home care, and general inpatient care. Respite care provides up to 5 days of around-the-clock care, usually in a nursing facility, to allow the primary family caregiver a break from the strain of in-home care. Continuous home care offers between 8 and 24 hours of in-home care, mostly nursing-level care, to manage an acute symptom crisis and enable the patient to stay at home. Finally, when patients on hospice have complex needs that meet criteria for inpatient hospitalizations, such as a pain crisis or an agitated delirium, they can remain on hospice using the general inpatient level of care. This care can be provided in a hospital or nursing facility that has a contract with a hospice agency or in a standalone inpatient hospice facility.²²

Patients frequently are not referred to hospice until very late in the course, which can perpetuate the myth that hospice somehow hastens the dying process. No data suggest that patients who choose hospice die sooner. One retrospective study even found that patients who enrolled in hospice lived 29 days longer than those with a comparable diagnosis who did not choose hospice.²³ While the study cannot prove that hospice extends survival, it supports anecdotal experiences that patients who choose hospice often experience an improvement in their quality of life and for some, it may even extend their life. Notably, a do-not-resuscitate (DNR) order is not required for patients to enroll in hospice. The hospice team will discuss patient's preference regarding resuscitation and may encourage patients to choose a DNR status.

Prevalence of Palliative Care Needs in IR Practice

Therapeutic interventions provided by IR specialists are frequently palliative in nature insofar as they offer possibility

Table 1 Examples of palliative interventional radiologic (IR) procedures

Symptom or issue	Examples of IR approach
Pain	Vertebroplasty Thermal ablation Nerve block/neurolisis
Dyspnea	Thoracentesis with or without tunneled catheter Bronchial stent
Nausea/vomiting	Venting gastrostomy Paracentesis with or without tunneled catheter Duodenal stent
Constipation	Colonic stent
Delirium	Percutaneous biliary drainage with or without stent Percutaneous nephrostomy with or without stent

of improvement in symptoms or function and/or come with less toxicity or risk than other alternatives, such as more open or surgical approaches. Because these interventions often come with relatively little risk, they can be performed even in patients with advanced stage of illness and even some patients with a limited functional status. In one series of 229 patients referred to IR, the majority (81%) met criteria for palliative care consultation. Half (50.7%) of this group had an underlying malignancy.²⁴ This finding underscores the extent to which IR specialists see patients with palliative care needs. Additionally, many of the procedures performed offer palliative benefit^{25,26} (► **Table 1**). Patients with palliative needs were more apt to receive repeated procedures²⁴; thus, the IR specialist might meet the same patient at different points in his/her trajectory, giving them the opportunity to appreciate changes in the patient's clinical status over time. For patients who decline over time, this may pose the challenge of needing to re-think the benefit: burden ratio of a procedure to be sure it is still in the patient's best interest.

Palliative Care Perspectives and Skills Pertinent to the IR Specialist

The technical skills of the IR specialist can be instrumental in allowing patients to achieve palliation of a symptom and/or alter the course of a patient's disease. Vertebroplasty and nerve blocks are examples of procedures that provide direct symptom relief. Percutaneous biliary drainage and nephrostomies may reduce symptoms, but they also can change the course of a patient's illness trajectory. Without them, patients may die of organ failure and/or be unable to safely receive treatment for an underlying malignancy. In addition to their procedural expertise, IR specialists must assess whether a patient can tolerate the procedure and understand the expected prognosis. The potential benefits and risks of a

particular procedure must be considered into the context of a patient's underlying disease trajectory. In helping guide patient's choices about undergoing a procedure, it is important that the IR specialist ascertain the patient's individual preference and priorities and determine if the procedure is likely to help them live better, based on their personal perspective. By simply asking patients "What matters to you most?" IR specialists can learn valuable information that can help guide recommendations regarding whether or not to pursue a procedure. An IR specialist practicing good palliative care will recognize not only when and how a procedure might help, but also when the same procedure should not be offered because it is either unlikely to yield benefit and/or it is not consistent with a given patient's stated values and goals.

Conclusion

Procedures done by IR specialists have enormous potential to alleviate symptoms and enhance function and quality of life for patients with serious illness, such as advanced malignancy. The presence of IR specialists at the bedside of inpatients, tumor boards, and multidisciplinary clinics may enhance the opportunities for IR to collaborate effectively with primary and palliative care teams and heighten the palliative care skills of IR clinicians. IR specialists should be recognized as a critical partner in providing palliative care to patients.

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