**Palliative Care in an Acute Care Setting**

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**Question:** How does the palliative care concept fit into the acute care setting?

**Answer:** Palliative care seeks to prevent, relieve, reduce, or soothe symptoms of disease for critically ill people who may or may not be dying. According to the World Health Organization, palliative care is “an approach that improves the quality of life of patients and their families, facing the problems associated with life-threatening illness, through the prevention and relief from suffering by means of early identification, impeccable assessment, treatment of pain, and other problems” (World Health Organization, 2002, p. 83).

Physical, psychosocial, and spiritual needs of patients and family members are addressed. The focus is not death but rather compassionate, specialized care for the living.

Palliative care may improve functioning and quality of life. It can, and should, coexist with curative treatment. A large part of the clinical focus is on aggressive symptom management, clear communication, and working with the patient and family as the unit of care. Palliative care is not

- Disease or treatment restricted
- Correlated to a predicted life expectancy or prognosis
- Dependent on code status of a patient
- Constrained to a particular site but may occur in an acute care hospital, extended care facility, home, or hospice.

In an acute care setting, palliative care is not hospice care. This distinction is important because of the prevalent misconception that palliative care and hospice care are synonymous. As a care concept, palliative care is broader than hospice care. Although all of hospice care is palliative care, not all palliative care is hospice care. Hospice supports patients through the dying process and the surviving family members through the dying and bereavement process. The hospice movement in the United States was built on lessons learned at St. Christopher’s Hospice in London, England, but evolved across different care settings that included independent hospices, home care, and consult teams in acute care hospitals (Doyle, Hanks, & MacDonald, 1999).

In the United States, hospice implies a six-month prognosis, no active disease-oriented treatment, and an insurance benefit, particularly the Medicare benefit. An expanded definition of palliative care that goes beyond hospice care still is controversial. “What’s unfortunate is that there are some in the hospice community that perceive this as a threat, when, in fact, it represents a triumph of hospice. Hospice has succeeded in convincing the rest of the world that this is good medical care. We are saying that good medical care needs to be rooted in all of the institutions in which patients are cared for” (Von Gunten & Romer, 2000, p. 118).

Principles of hospice and palliative care are similar and compatible (American Association of Colleges of Nursing & City of Hope National Medical Center, 2000; Egan & Labyak, 2001; Krammer, Ring, Martinez, Jacobs, & Williams, 2001). These principles include the following.

- Patients and family members are treated as the unit of care, with care given that reflects their personal, cultural, and religious values, wishes, and goals.
- Attention is given to physical, psychological, social, and spiritual symptoms and needs.
- Palliative care is appropriate at any stage of the disease regardless of whether the patient is seeking curative treatment.
- An interdisciplinary team is critical to providing holistic, comprehensive care and addressing the many concerns that patients and families face when coping with a life-threatening illness. Patients and families are part of this team.
- Goals are altered as patient and family needs change.
- Education and support of patients and their families is provided, including information about the dying process.
- Care extends to all patients and families across diverse life-threatening illnesses. Palliative care is appropriate in all settings and for patients and families facing any life-threatening illness as well as those who experience sudden illness or accidents that result in death.
- Bereavement support is offered.

The most common models for palliative care in an acute care setting are a consultative one and/or a designated unit or group of inpatient beds. The need for palliative care along the disease trajectory is best illustrated as a continuum (see Figure 1) with palliative care and curative treatment coexisting. This continuum ideally involves a palliative care specialist working early in a patient’s illness to determine and implement goals of therapy. If or when the goals of care change to palliative ones, the palliative care specialist already is known to the patient and family and becomes more active in the treatment plan. Perhaps one of the most important aspects of this approach is that the care of the patient is not being transferred to a stranger.

Palliative care in an acute care setting is not always readily accepted. Healthcare personnel in hospitals are very focused on curative goals and perform them well. The switch to providing comfort care is an uneasy and uncomfortable one for many practitioners. This often results in late referrals to palliative care and referrals only of those who are expected to die shortly. Increasing awareness about care options, both by professionals and the public, is a first step in changing this perspective that sees all palliative care as hospice or end-of-life care.

When developing a palliative care program in an acute care setting, begin by identifying the patient population to be served. Any critically ill patient can benefit from palliative care. A specific time-limited prognosis is not necessary. Palliative care addresses symptoms and quality of life. Further, however, the patient population may be unique to each setting. Potential patient populations that may use palliative care services in an acute setting would include those with acute neurologic diagnoses, such as cerebrovascular accident or subdural hematoma; acute trauma in which further aggressive treatment is considered futile; and end-stage cardiac, respiratory, or...
renal disease and cancer. This information may be gleaned from a retrospective chart review looking at patients currently referred to hospice, those referred to hospice but died within a short time of the referral, and/or those with high readmission rates in the last 6–12 months of life.

Planning efforts should involve an interdisciplinary team. Physician champions and support cannot be underestimated as a palliative care program is planned and implemented. Team members at a minimum must include a physician, nurse, social worker, and chaplain. Access to an ethicist, dietitian, and pharmacist is desirable. A group of volunteers also can be a strong, positive influence on a palliative care program.

Education efforts should follow careful planning. To begin, the problem, not the solution, must be determined. The problem includes the realities of life-limiting diseases, futility of curative treatments, and prolongation of the dying process. According to a report by the Institute of Medicine (Field & Cassel, 1997),

- Too many people die with pain or other distressing symptoms that could be prevented or treated with existing knowledge and therapies.
- Organizational, economic, legal, and educational barriers to good end-of-life care exist.
- Biomedical, social science, and health services researchers must look at gaps in knowledge about end-of-life care.
- Better data and tools to evaluate end-of-life outcomes are necessary to improve accountability for quality end-of-life care.

Once the problem is understood, identification of good clinical care for these patients follows. Expanding care options would offer palliative care during any life-threatening diagnosis, at any time during the illness, or whenever patients and families were prepared to accept it. Care needs still are acute and may be demanding. This level may continue until treatments and procedures aimed at cure or remission have been discontinued. Even then, symptom management may continue at an acute level and require hospitalization. According to Kemp (1999), preventing or relieving suffering require a high level of competence and are active, aggressive endeavors.

Palliative care recognizes that healing occurs on many levels and may be independent of medical care. In these efforts, nurses must listen to patients and their families. They will voice what they need if given the chance. As Dr. Cicely Saunders said so eloquently, “I once asked a man who knew he was dying what he looked for most in the people around him. He paused for a moment and said, ‘I look to see if the people are trying to help me’” (Boyle, 2000, p. 919). He asked for the effort of trying, not necessarily for success. Nursing must continue trying to provide the best possible palliative care. Palliative care continues to evolve, with significant strides being made in the acute care setting.

Woody Allen said, “I’m not afraid of dying, I just don’t want to be there when it happens.” Nurses must be there for patients and families, helping them to deal with critical and life-threatening situations. Palliative care encompasses the essence of nursing. It is patient and family centered with expertise in symptom management and communication.

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Methylenphenidate Use for the Management of Opioid-Induced Sedation

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Question: How does methylenphenidate (Ritalin™, Novartis Pharmaceuticals, East Hanover, NJ) help with opioid-induced sedation?

Answer: The management of cancer pain is a challenging clinical issue. Mild to moderate pain may be controlled by the use of nonsteroidal anti-inflammatory drugs (NSAIDs) with or without the addition of low-dose opioids. However, management of moderate to severe pain often requires the use of higher doses of opioid analogues to control the pain. Opioid analogues are associated with several potentially dose-limiting side effects, including nausea, sedation, constipation, vomiting, and opioid-induced respiratory depression. Methylenphenidate is a CNS stimulant that has been shown to reduce opioid-induced sedation. The mechanism of action is thought to be related to the stimulation of dopaminergic pathways, which can help to counteract the sedative effects of opioids.

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References


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Key Words: opioid-induced sedation, methylenphenidate, CNS stimulants
diaphoresis, and respiratory depression. Although most patients develop some degree of tolerance to the sedative effects of chronic opioid use, sedation can be a major dose-limiting side effect in some individuals with a significant impact on quality of life (Miaskowski & Portenoy, 1998). Several published reports have evaluated the use of amphetamines and amphetamine derivatives to decrease the sedation associated with opioid therapy for acute and chronic pain.

Much of the information about the use of amphetamines to counteract opioid-induced sedation is about methylphenidate. Methylphenidate is a central nervous system (CNS) stimulant that is structurally related to amphetamine. The drug is most widely known to control hyperactivity and attention deficit disorder in children (Deglin & Val lerand, 2003; Schwartz, Thompson, & Mau sood, 2002).

Mechanism of Action and Pharmacokinetics

The mechanism of action of methylphenidate is not understood completely, but the drug is believed to increase brain stem and cortical arousal to produce its stimulant effect (Novartis Pharmaceuticals, 2001). CNS stimulants boost central nervous stimulation, decrease fatigue, and heighten motor activity. Other drugs classified as CNS stimulants include dexamphetamine, dextroampheta mine, and pemoline. The onset of action of methylphenidate is not known, but its peak effect is one to three hours after oral ingestion. Methylphenidate is metabolized by the liver (Deglin & Vallerand, 2003). Improvement when taking methylphenidate should be seen within 48 hours (Walsh, Doona, Molnar, & Lipnickey, 2000).

Uses in Cancer Care

Methylphenidate has been suggested to have a beneficial effect controlling fatigue and hiccups, increasing energy, decreasing opioid-induced sedation, and managing depression in patients with cancer, particularly in the palliative setting (Homsi, Walsh, & Nelson, 2000; Miaskowski & Portenoy, 1998; National Cancer Institute [NCI], 2003; Walsh et al., 2000). Although no studies document its efficacy for fatigue with advanced cancer, methylphenidate is widely recommended as a treatment for fatigue (Homsi et al.; Komurcu et al., 2000; Miaskowski & Portenoy). One study of patients with advanced cancer found that fatigue did not improve when methylphenidate was given for depression (Macleod, 1998). Psychostimulants, including methylphenidate, have been used widely in patients with advanced cancer who present with depression, weakness, diminished concentration, and decreased energy (Olin & Masand, 1996; Wilwerding et al., 1995). Methylphenidate has shown efficacy in decreasing drowsiness in patients with cancer receiving narcotics (Bruera, Miller, Macmillan, & Kuehn, 1992; Wilwerding et al.). Methylphenidate also has been found to increase energy in patients with brain tumors when it was given for mood and cognitive disorders (Weitzner, Myers, & Valentine, 1995).

Administering Methylphenidate

Methylphenidate is given orally (Deglin & Vallerand, 2003). The recommended dose for opioid-induced lethargy is 2.5–5 mg given twice a day and can be increased up to 20 mg twice a day (Walsh et al., 2000). The usual time of administration is morning and noon to decrease the problem of insomnia (Homsi et al., 2000; NCI, 2003). The medication should not be given on an empty stomach because it is absorbed from the gastrointestinal tract and food will increase the rate of absorption (Sarhill et al., 2001). Peak plasma concentration is one to three hours after dose administration, and the plasma half-life is about two hours (Sarhill et al.). Because improvement generally is seen within 48 hours of taking methylphenidate, some clinicians stop treatment with this medication after one week if improvement is not achieved or anytime a patient develops significant side effects (Sarhill et al.).

Contraindications and Precautions

Methylphenidate should not be given to patients with glaucoma, severe heart disease, or high anxiety levels. Cardiac, pulmonary, CNS, and renal and hepatic side effects have been associated with amphetamine use (Kurch, 1996). Patients with a history of seizures also should not take this medication because methylphenidate may lower their seizure threshold. Safe concomitant use of anti convulsants and methylphenidate has not been established (Novartis Pharmaceuticals, 2001). Methylphenidate might interact with different medications, including anticoagulants, anticonvulsants, phenylbutazone, and tricyclic medications. Dosages of these medications may need to be adjusted because methylphenidate may inhibit the metabolism or increase the effect of these medications.

Increased restlessness and insomnia are the two most common side effects associated with the administration of methylphenidate (Novartis Pharmaceuticals, 2001). Other reported side effects include dry mouth, confusion, tachycardia, and nausea and vomiting (Macleod, 1998; Olin & Masand, 1996). However, other medications that the patient may be taking (e.g., opioids) or the patient’s diagnosis also may cause these side effects.

Monitoring

Monitoring patients who are taking methylphenidate requires observing patients’ levels of fatigue to determine whether improvement occurs with therapy. Fatigue is a subjective measurement; thus, questioning patients about their perception of fatigue is important. Many clinical tools are available for measuring fatigue or sedation, but one of the simpler tools available is the Visual Analog Scale.

During prolonged therapy with methylphenidate, a patient’s complete blood count and platelet count should be monitored because of the potential lowering of these blood counts. Patients suffering from hypertension must monitor their blood pressure closely. Methylphenidate should not be stopped abruptly but rather should be tapered gradually (Bucin, Mazzocato, Bern ey, & Stiefl, 2001).

Conclusion

Although studies that evaluate the administration of methylphenidate for the treatment of opioid-induced sedation are limited, information is available that suggests that this medication may be effective for patients who experience dose-limiting sedation from opioid therapy. Each patient must be assessed individually to see whether he or she benefits from this therapy and to minimize sedation. Other methods of decreasing sedation should be evaluated such as adding around-the-clock administration of NSAIDs and decreasing the dose of opioids that a patient may be taking. Unfortunately, for patients experiencing chronic pain, decreasing the dose of opioids may not be feasible. Nurses also must be aware that tolerance to lower doses of stimulants (including caffeine, amphetamine, and amphetamine derivative) may occur. This effect may result in the need to increase the dose to maintain the desired effect, which may predispose patients to potential adverse effects (Corey, Heck, & Weathermon, 1999). Overall, using methylphenidate for opioid-induced sedation is one more option that may be considered to help improve a patient’s quality of life. Clearly, this is an area of study that could greatly benefit from further nursing research.

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References


