

# Goals of Therapy Should Guide End-of-Life Care

BY KERRI WACHTER  
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TAMPA — Physicians caring for older adults at the end of life commonly have to treat these patients for urinary incontinence and delirium and often must decide whether the use of feeding tubes would be helpful.

Several experts offered their tips on dealing with these challenges at the annual meeting of the American Academy of Hospice and Palliative Medicine and the Hospice and Palliative Nurses Association.

## Urinary Incontinence

Urinary incontinence is a troubling and common concern among older patients and is an independent predictor of nursing home placement. Urinary incontinence erodes a patient's quality of life through social withdrawal, body image distortion, and depression, said Dr. Lynn Bunch of Mount Sinai Medical Center in New York. This condition also increases caregiver burden because of the need for frequent changes of undergarments and the extra work involved in preventing and treating skin breakdown.

All palliative care patients should routinely be assessed for urinary incontinence, Dr. Bunch said. If the onset is acute, do a medical evaluation to look for a reversible cause, she said. Reversible causes include urinary tract infection, volume overload, stool impaction, hyperglycemia, hypercalcemia, vaginitis, and urethritis. A review of medications also is important, looking in particular for diuretics (which can increase urinary output), sedatives (which impair mobility and cognition), anticholinergics (which decrease bladder contractility), and  $\alpha$ -adrenergics (which alter sphincter tone).

Functional incontinence—an inability to reach the toilet in time and/or coor-

minate the movements necessary to use the toilet—is common in the palliative care setting because many of these patients have functional decline and loss of mobility. Interventions for functional incontinence include physical rehabilitation, use of assistive devices, space planning/furniture rearrangement, use of a bedside commode, assistance with transfers, elimination of chemical/physical restraints, treatment of depression, scheduled voiding times, decreased intake of fluids at night, and discontinuation of or change of dosing time for diuretics.

It's important to talk with families of palliative care patients about functional urinary incontinence, Dr. Bunch said. Advise caregivers that all patients with life-limiting disease, especially those with dementia, will eventually develop functional urinary incontinence. Provide families with support and resources for this eventuality.

Chronic indwelling catheters have the advantages of protecting skin from moisture, making patient care easier, and decreasing the need for linen and clothing changes. However, they may be uncomfortable for patients, and because they limit patient mobility, they may contribute to delirium and agitation, which is a symptom of delirium. The decision to catheterize at the end of life should be individualized, Dr. Bunch said.

## Delirium

The mortality rate of hospitalized patients with delirium ranges from 22% to 76%, and the 1-year mortality rate associated with delirium is roughly 35%-40%. The diagnosis of delirium is primarily

clinical, and the condition often goes unrecognized. "Often, we fail to do a formal cognitive assessment," said Dr. Elise C. Carey, an internal medicine physician who specializes in geriatrics at the Mayo Clinic in Rochester, Minn.

When a patient becomes agitated, determine if it represents an acute change in mental status, and perform a cognitive assessment and an evaluation for delirium using a tool like the Confusion Assessment Method. Identify and address any predisposing or precipitating factors. It's important to remember that delirium is often the sole manifestation of underlying disease. "I can't emphasize this enough," Dr.

Carey said.

Evaluate the patient for new or intercurrent illness: Take a history, do a physical exam, run selected lab tests, and get an ECG. Also look for infection, low blood volume, pressure sores, and poor nutrition. Review the patient's medica-

tions, looking for potential troublemakers—such as anticholinergic effects, narcotic pain medications, and benzo-diazepines—and replacing them with alternatives that are less likely to cause delirium. Evaluate environmental factors that may be contributing to the patient's agitation—such as recently performed surgery or multiple procedures, a room change, an ICU stay, sleep deprivation, the use of restraints or bladder catheters, and pain. Then take the necessary steps to treat any identified causes, provide supportive care, and prevent complications.

In terms of treating behavioral symptoms, "primarily we're going to try to rely on nonpharmacologic therapies," Dr. Carey said. Such an approach in-

cludes reorienting patients to their surroundings, encouraging family involvement, having people sit with the patient, avoiding the use of indwelling catheters and of restraints, working to maintain the patient's mobility and self-care ability, and normalizing the patient's sleep-wake cycle.

In cases of severe agitation, pharmacologic treatment may be necessary. The first-line therapy is low-dose haloperidol (Haldol), at 0.5-1.0 mg twice daily plus every 4 hours as needed, Dr. Carey said.

## Feeding Tubes

Difficulties with eating are a hallmark of end-stage dementia, said Dr. Rachele E. Bernacki, a hospitalist, geriatrician, and palliative medicine specialist with the University of California San Francisco Medical Center's palliative care service. Approximately one-third of U.S. nursing home residents with advanced dementia are tube fed, but the number of tube-fed dementia patients varies 10-fold across the country.

Tube feeding commonly is used to prevent aspiration pneumonia and provide nutrition in patients who have trouble eating normally. However, no randomized, controlled trials of tube feeding have been published; of the observational studies in the literature, none have shown a reduction in the risk of aspiration and aspiration pneumonia. There is also no evidence of improved nutritional status with the use of feeding tubes, and it does not appear to prolong survival, Dr. Bernacki said.

There are several drawbacks to the use of feeding tubes. The patient does not experience any gustatory pleasure, may experience discomfort, and has diminished social contact.

"As with everything in palliative care, always try to use the goals of therapy as your guide," Dr. Bernacki said. ■

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# Outpatient Arterial Procedures Appear Safe for Octogenarians

BY MIRIAM E. TUCKER  
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WASHINGTON — Contrary to common belief, octogenarians can safely undergo diagnostic arteriography and arterial interventions as outpatient procedures.

That was the conclusion of a retrospective comparison of outpatient arterial procedures performed over 36 months (2005-2007) in 91 patients aged 80 years and above (mean 83.8) with those of 260 patients done in adults aged 50-79 years (mean 67.6) during the same time period by Dr. George G. Hartnell.

"Octogenarians seem to tolerate arteriography and arterial interventions as well as younger patients," Dr. Hartnell, chief of cardiovascular and interventional radiology of Baystate Medical Center, Springfield, Mass., said at the annual meeting of the Society of Interventional Radiology.

The risks of diagnostic arteriography and arterial interventions are believed to increase with age. Some have suggested that patients in their 80s and older who require such procedures should be automatically admitted to the hospital, but it appears likely that in many cases, the procedures aren't offered to the very elderly at all. "Octogenarians may be inappropriately denied

treatment because of the perceived high risk," he said.

Because of that bias, octogenarians often are excluded—deliberately or unconsciously—from clinical trials of these procedures, so there is no database to guide interventionalists. "There should be more use of these procedures in the elderly, but data are lacking," he remarked.

During the study period, 27% of the octogenarians underwent diagnostic arteriography (10 renal, 14 femoral, and 1 carotids/upper-extremity procedures), as did 43% of the 50-79 year old patients (30 renal, 46 femoral, 31 carotids/UE, and 7 mesenteric procedures).

Angiography/cryoplasty was performed in 19 octogenarians (21%) and 26 of the younger adults (10%). Stenting, with or without angioplasty, was done in 46 (51%) of the octogenarians (9 multivessel) and in 119 (46%) of the 50- to 79-year-olds (34 multivessel).

Patients of all ages were treated the same way, with closure devices used in less than 2% of all the interventions. "The routine or frequent use of closure devices is not necessary," he commented.

The fact that the proportion of patients who underwent diagnostic arteriography was significantly lower among the 80-plus group (27% vs. 43%) probably reflects the bias: "They just don't get referred," Dr. Hartnell remarked.

Reported rates of complications in the two age groups were very similar. Total events occurred in 5.5% of the octogenarians and 5.7% of the younger cohort, and major events requiring hospital admission in 2.2% and 2.3%, respectively. Worsening ischemia occurred in one younger patient and none of the older ones. There was one hematoma requiring admission among the octogenarians and two in the 50- to 79-year-olds, while hematomas of greater than 3 cm requiring no action occurred in three of the older group (3.3%) and six (2.3%) of the younger group. Heart failure developed in one younger patient and none of the older ones, and there were no deaths in either group, he reported.

These complication rates fall within the thresholds set by the Society of Interventional Radiology, which include an overall diagnostic arteriography threshold for major complications of no more than 1% (J. Vasc. Interv. Radiol. 2003;14:S283-8). Among the Society's upper limits for complications from percutaneous renal revascularization are 1% for 30-day mortality, 2% for renal artery occlusions and acute renal failure, and 5% for access site hematomas requiring surgery, transfusion, or prolonged hospital stay (J. Vasc. Interv. Radiol. 2003;14:S219-21). ■