



PALLIATIVE CARE CASE OF THE MONTH

“The Surgical Pause for Hip Fractures – Recognizing it as an Intervention and not a Delay”

by

**Ashten Ebersbacher, MD
and Amar D. Bansal, MD**

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Case: Ms. H is a 90-year-old woman with a history of moderate to severe dementia, hypothyroidism, and a prior right hip fracture in October 2024 requiring total hip arthroplasty, followed by subsequent fall in March 2025 requiring further surgical correction. She was brought to the hospital after a witnessed mechanical fall at her long-term care facility. Imaging revealed a displaced right periprosthetic hip fracture. She was admitted to the medicine service with orthopedic consultation.

Prior to admission, Ms. H resided in a nursing home where she required full assistance with activities of daily living. At baseline, she was not able to answer orientation questions and had regular behavioral disturbances consisting of mild verbal and psychomotor agitation. She could ambulate short distances with a walker and staff support, required scheduled toileting, and needed to be fed by caregivers.

Given her advanced dementia, frailty, and limited functional capacity, the medicine team initiated a surgical pause and consulted palliative care to help clarify goals of care and determine whether an orthopedic intervention made sense.

Understanding the Surgical Pause

The surgical pause is a deliberate step in perioperative care aimed at optimizing outcomes for frail, high-risk patients. Rather than the default path of proceeding to the operating room, the surgical pause provides an opportunity to reflect on the patient's overall health, prognosis, and personal goals¹. It invites a multidisciplinary conversation to consider whether the risks and benefits of surgery make it a meaningful choice, and if the proposed outcome is an acceptable quality of life for the patient¹.

Understanding pre-existing frailty is a key component in navigating this process. Frailty is defined as a decline in physiological reserve and function and is strongly associated with poor postoperative outcomes, including increased morbidity and mortality²⁻⁴. The Risk Analysis Index (RAI) is a validated tool that helps clinicians screen for frailty in under three minutes, incorporating variables like age, comorbidities, and baseline function^{2,5}.

The RAI has been recognized by the American Society of Anesthesiologists as one of several validated tools for identifying frailty in older adults planned for inpatient surgery. Due to ease of use, this tool is preferred when performing a preoperative risk assessment⁶. Hospitalists tend to utilize this tool due to how quickly it can be administered, with information that can be obtained by the patient or their caregiver. Once a patient is identified as frail, the pause allows a team of multidisciplinary clinicians to clarify the purpose of the proposed surgery: Is it to prolong life, improve function, or alleviate pain? It also allows time to explore what recovery might look like and whether that outcome aligns with the patient's values and prior quality of life. These conversations help the care team determine whether surgical intervention is consistent with the patient's goals and realistic expectations

Clinical Outcomes After Hip Fracture in Advanced Dementia

Hip fractures are a significant event for patients with advanced dementia, often considered a sentinel event due to their strong association with functional decline, complications, and high mortality⁷.

For patients who reside in nursing homes and live with profound cognitive impairment, the decision to pursue surgery is especially nuanced. A study published in JAMA Internal Medicine showed that among nursing home residents with advanced dementia who sustained a hip fracture, 6-month mortality was 31.5% for those who underwent surgery compared to 53.8% for those who managed non-surgically. Median survival was 1.4 years and 0.4 years, respectively⁸. Several studies have demonstrated that performing surgery within 24 to 48 hours after a hip fracture in elderly patients is associated with a lower mortality rate, showing a 20% reduction in one-year mortality when surgery is done within 48 hours. However, determining the optimal timing for surgery in elderly patients with dementia remains complex, as the goals of surgery and desired outcomes can vary significantly based on the individual patient's condition and values^{7,9}.

Furthermore, survival is only part of the picture. Patients with dementia often have worse postoperative outcomes compared to those without dementia, regardless of the intervention. They have higher rates of delirium, infection, respiratory complications, and failure to regain mobility¹⁰. Pain, pressure ulcers, and immobility also weigh heavily in the decision-making process and must be considered in the context of the patient's baseline quality of life.

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Surgical vs. Non- surgical Management

The management of hip fractures in patients with advanced dementia requires an individualized, multidisciplinary approach. Decisions regarding operative versus non-operative treatment should involve the patient's surrogate decision-maker(s), the primary medical team, orthopedic surgery, and palliative care.

Surgical intervention is not always aimed at restoring mobility. In patients who are bedbound, the primary indication for surgery may be pain control. Conversely, non-operative management, using strategies such as traction, positioning, and analgesia, may be sufficient to alleviate pain in patients unlikely to derive meaningful benefit from surgery ^{7, 11}.

Prognosis plays a critical role in guiding treatment. If life expectancy is measured in months to years, surgical repair may be appropriate, particularly when the goals include restoring ambulation or managing significant pain. However, if prognosis is limited to days to weeks, non-operative management is generally preferred. In such cases, shifting focus to comfort, avoidance of hospitalization, and early integration of hospice services can be appropriate ^{7, 12}. It is important to recognize that fewer than 10% of patients remain ambulatory following hip fracture without surgical repair ⁷. A meta-analysis and systemic review found that 9.6% of elderly patients who were managed non-operatively were able to mobilize 6 months after the inciting event ¹³. Additionally, in a large cohort study of nursing home residents with advanced dementia who suffered a hip fracture and were ambulatory prior to the fracture, only 4.8% remained ambulatory with non-operative management at 6 months, compared to 10.7% if managed operatively ⁷.

For patients who are non-ambulatory at baseline, the decision to pursue surgery must consider several additional factors. These include the severity of pain, tolerance of analgesics, and the presence of pain during movement or bowel care. In cases of severe discomfort, surgical intervention may provide better pain control. The patient's comorbid conditions should also be assessed; surgery may be more appropriate for patients with stable, well-managed comorbidities, while those with multiple poorly controlled conditions may face increased perioperative risks. Ultimately, the surrogate decision-maker should engage in discussions around anticipated outcomes and acceptable quality of life postoperatively ⁷.

The table below provides a high-level comparison of surgical versus non-surgical management

Consideration	Surgical Management	Non-Surgical Management
Pain Relief	Often more immediate	Achievable with medication, positioning
Survival	Modestly improved (median 1.4 yrs)	Shorter (median 0.4 yrs)
Function	Rarely regains prior mobility	Continued functional decline expected
Complications	High (delirium, infection, ulcers)	Lower, avoids surgical risks
Hospital Course	Surgery, anesthesia, rehabilitation	Focus on comfort, possible early discharge or hospice

Conclusion:

After multiple goals-of-care discussions with Ms. H's surrogate decision-maker and the hospital medicine, palliative care, and orthopedic teams, the consensus was that non-operative management best aligned with her goals. Surgical repair would have required a high-risk proximal femur replacement due to the peri-prosthetic nature of the fracture and was unlikely to improve her function, given her moderate-to-severe dementia and overall decline after several falls.

The team prioritized comfort-focused care. Her pain was managed with scheduled acetaminophen and low-dose oxycodone, along with a bowel regimen to prevent constipation due to limited mobility. Behavioral symptoms related to her dementia were addressed with as-needed nighttime quetiapine. A hip-knee orthosis was provided to stabilize the limb, minimize pain, and assist with nursing care. While hospice care was discussed, her surrogate decision-maker opted for discharge to her skilled nursing facility without hospice at the time.

This case illustrates the importance of pausing before proceeding. In our population of patients that have advanced dementia and are suffering from a hip fracture, the surgical pause is not a delay, but an intervention itself. It ensures we are asking the right questions:

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Conclusion (Continued)

What matters most to the patient? What is their baseline? And will surgery move them closer to or further from their goals?

By integrating frailty screening, prognostication, and interdisciplinary collaboration, clinicians can support patients and families in making informed, compassionate decisions.

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