Acute Care of the Elderly Column

International partnerships: Advancing nursing care of the older adult with fragility hip fracture

Anita J. Meehan, MSN, RN-BC, ONC a,b,c,* , Valerie MacDonald, MSN, ONC b,d,e

a Akron General Medical Center, USA
b ICON—International Collaboration of Orthopaedic Nursing, USA
c NAON—National Association of Orthopaedic Nurses, USA
d Fraser Health Authority, Canada
e CONA—Canadian Orthopaedic Nurses Association, Canada

Many older adults fear hip fracture and their fear is not unfounded; fragility hip fractures are associated with: impaired mobility, increased reliance on others, diminished health and sometimes death. Over 25% of older adults with hip fracture die within one year of fracture and of those that survive it is estimated that between 24% and 75% will not regain their pre-fracture level of independence.1

The increasing prevalence of hip fractures is a global concern. The International Osteoporosis Foundation reports that worldwide 1.6 million1 fragility hip fractures occur every year projecting that this number will climb to an annual rate of between 4.5 and 6.3 million by the year 2050.2 Costs associated with care are soaring as well and health care systems around the world are struggling to meet the demands for service in the face of increasing fiscal constraints.

The case of Mrs. Mae Wong, (a composite patient), illustrates the urgent need to improve care. Mrs. Mae Wong, age 87, was hurrying to the bathroom when she suddenly felt dizzy and landed on the floor. It was a full 24 h before her sister found her. EMS was summoned and she is transported to her local emergency room with pain in her right hip. An X-ray reveals a fractured hip.

Historically, the focus would be on Mrs. Wong’s surgical repair, often involving prolonged preoperative fasting, spending many hours or even days, immobilized in an unfamiliar environment, awaiting access to the operating room.3,4 A urinary catheter, an IV and a dose of analgesics and perhaps an anti-emetic, ‘to help the patient settle’ were commonly part of the plan of care. Traumatic stress, pain, starvation, dehydration and immobility increase Mrs. Wong’s risk of developing pressure ulcers, confusion, and agitation or more commonly and more often overlooked, hypo-active delirium.5,6 When identified, reports of ‘confusion’ may be met with comments such as “what do you expect, she’s 87 years old” and may be followed by an order to “hold her pain meds”.7 Mobilization and removal of the urinary catheter might be delayed due to pain, agitation or lethargy. Mrs. Wong may be restrained to prevent her from tugging on the catheter and ‘dislodging the medical device’ or possibly for her ‘safety’ to prevent falling as despite instructions she may attempt to get out of bed unassisted. These well-intended interventions only serve to increase her risk for developing complications that will set her on a path for functional decline. A urinary tract infection and a pressure ulcer are likely to develop and after days in the hospital,8 she will be sent to a nursing care facility, too weak and frail to manage at home. Within weeks she may fall again or possibly develop an infection, be readmitted to the hospital and the spiral downward would continue.

This scenario is played out all too frequently in acute care hospitals around the world, resulting in needless suffering, poor outcomes and significant health care costs. Orthopedic and trauma nurses recognize the opportunity and urgent need to critically evaluate current care approaches for these vulnerable patients. A review of research findings and clinical reviews of nursing efforts around the world confirms that risks for the development of common complications are foreseeable and that prompt nursing interventions can prevent and/or ameliorate many common, costly complications. For example, research informs us that delirium is

* Corresponding author. Akron General Medical Center, USA.
E-mail address: Anita.Meehan@akrongeneral.org (A.J. Meehan).

0197-4572/8 – see front matter © 2013 Mosby, Inc. All rights reserved.
http://dx.doi.org/10.1016/j.gerinurse.2013.02.011
a common complication occurring in as many as 60% older adults with hip fracture and a major cause of morbidity and mortality. Despite known risk factors, delirium often goes undetected by both nurses and physicians. We know that age appropriate pain management, careful attention to nutrition and early mobilization are the foundations of recovery. We know that hastening and promoting functional recovery reduces health care costs and improves the opportunity for patients to return to their pre-fracture level of care. Nurses with both geriatric and orthopedic knowledge are ideally positioned to play a pivotal role in improving the health, recovery, and quality of life of these vulnerable patients.

Here is a look at how care for Mrs. Wong might be improved. On admission a skilled nursing assessment will reveal she has mild cognitive impairment, congestive heart failure, malnutrition, dehydration, urge incontinence, cataracts and chronic arthritic pain. These are identified as common co-morbid conditions that will contribute to increasing her risk for falling, and for developing pressure ulcers and delirium. Prompt initiation of evidence-supported nursing strategies are implemented to address each of these risk factors knowing this is essential to avoid life-threatening complications during hospitalization. All too often the older person who falls alone at home is too weak to summon help or change positions. The skilled nurse recognizes that profound periods of immobility can lead to renal compromise and pressure ulcers and initiates monitoring and interventions to address these risks. Family is invited and supported to partner with staff to provide reassurance and comfort.

The nurse will collaborate with physicians, diagnostic services and operating room staff to ensure the patient has priority access to surgery recognizing that prolonged waits are associated with longer lengths of stay, increased morbidity and mortality. Avoiding indwelling urinary catheter insertion or removing the device within 24 h of surgery will reduce the risk of infection. Skilled pain management will enable Mrs. Wong to mobilize and rest for a smoother and faster recovery. Her potential for social isolation and her need for home safety will be assessed and factored into the plan of care.

The evidence is clear; a function-focused approach to care must be a priority. When foreseeable risks are proactively identified and addressed recovery is hastened, complications are fewer and costs are reduced. It is important that orthopedic and trauma nurses around the world are informed of the unique care needs of the older adult with fragility hip fracture. It is also important that they are aware of evidence-supported care strategies proven to improve outcomes for these vulnerable patients.

In 2010, members of the International Collaboration of Orthopaedic Nursing (ICON) advisory board, an association of national orthopedic nursing associations from nine countries across four continents, identified fragility hip fracture as a common priority nursing care concern. Organizations in several countries had published best practice documents to improve outcomes and reduce costs for this patient population; however the focus was primarily on the medical management of these patients. Orthopedic and trauma nurses are experienced in caring for musculoskeletal conditions and ideally positioned to positively influence care for these vulnerable patients. Despite their expertise related to care of traumatic fractures, they often lack sufficient awareness of the unique needs of the older adult; specifically the interplay of factors such as age related changes, chronic conditions and susceptibility to complications. The group identified the need for a practical ‘toolkit’ for point of care nurses; one based on proven care strategies for older adults with fragility hip fractures. The proposal to create an internationally supported resource was unanimously approved.

The ICON convened a workgroup of nurses with experience in orthopedics, trauma and gerontological nursing from across the globe to participate on this project. The team was comprised of nurses from ten countries: Australia/New Zealand, Denmark, Canada, Great Britain, Hong Kong, Ireland, Malta, Sweden, and USA. Meetings were held via Skype and email over the course of eighteen months with one face-to-face meeting in Bristol, England in September 2011. Guided by a range of information from research and clinical practice, as well as reviews from international nursing experts in each content area, the document focuses on those common complications of older people with hip fracture that respond to independent nursing intervention.

<table>
<thead>
<tr>
<th>Pain</th>
<th>Delirium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pressure ulcers</td>
<td>Malnutrition &amp; dehydration</td>
</tr>
<tr>
<td>Constipation/urinary tract infection</td>
<td>Immobility</td>
</tr>
</tbody>
</table>

The common thread throughout each section identifies vigilant nursing assessment, prompt intervention and self-management as vital components in preventing the development of common complications. If complications do occur and they are identified early on, they may resolve with appropriate and timely nursing management strategies. Hyperlinks are embedded in the online document enabling nurses to quickly access a range of assessment tools and practice resources and each section contains an ‘at a glance’ one-page summary for the convenience of the bedside clinician.

The next step is to disseminate this information. The ICON recognizes NICHE as an organization committed to advancing nursing excellence in the care of older adults and appreciates the opportunity to share this resource with NICHE members. We invite you to review the work and share it with your colleagues. The document is published in 2 sections; both of the articles can be accessed free of charge through the ICON website www.orthopaedicnursing.org as well as via a link on the NICHE website. In response to the global rise of fragility fractures and related musculoskeletal conditions NICHE is in the process of developing a variety of resources illuminating best practice innovations from NICHE sites around the world. The ICON is honored to partner with this prestigious group to improve outcomes for our older patients and keep the global aging population moving—one patient at a time.

References