Geriatric Syndromes Tied to Prior Cancer

BY DAMIAN McNAMARA

ORLANDO — Hearing difficulties, depression, incontinence, osteoporosis, and falls are reported significantly more often by Medicare beneficiaries with a cancer history than by those who were never diagnosed with cancer, according to a survey of a nationally representative sample of beneficiaries.

Researchers compared reports of geriatric syndromes among 2,349 people with a cancer diagnosis history in the 2003 Medicare Current Beneficiary Survey with those among 10,128 people who did not have a cancer history. The overall difference was "highly statistically significant," with 63% of the cancer history group reporting one or more geriatric syndromes vs. 57% of the controls, Dr. Supriya Gupta Mohile reported at the annual meeting of the American Society of Clinical Oncology.

History of cancer was independently associated with increased prevalence of self-reported falls (adjusted odds ratio 1.18), depression (OR 1.19), osteoporosis (OR 1.20), trouble hearing (OR 1.31), and incontinence (OR 1.35). It was not significantly associated with dementia/memory loss (adjusted OR 1.04), trouble seeing (OR 1.07), or trouble eating (OR 1.11).

"Clinicians should ask older cancer patients about geriatric syndromes in addition to comorbidity in order to fully evaluate their health status," said Dr. Mohile, a geriatric oncologist at the University of Rochester (N.Y.).

The 12,477 Medicare beneficiaries studied were community-dwelling adults aged 65 years and older. The 18% who reported a relevant history had a diagnosis of nonskin malignancy. Also, to be considered a true geriatric syndrome, participants had to report symptoms severe or frequent enough to interfere with activities of daily living.

"Geriatric syndromes are highly prevalent in the elderly, especially in those who are frail," Dr. Mohile said. The syndromes also are highly prevalent in newly diagnosed colon (45%), prostate (51%), and breast (35%) cancer patients (J. Clin. Oncol. 2006; 24:2304-10).

Compared with the controls in the current study, the cancer history group was older (mean age, 77.4 years vs. 76.5 years), more often white (89.7% vs. 86.2%), and more likely to have some college education (34.7% vs. 31.7%). A higher percentage of the cancer history group reported two or more comorbidities (34% vs. 30%).

"We also looked at impact of cancer subtype on numbers and specific types of geriatric syndromes," Dr. Mohile said. Patients who reported the highest mean number of geriatric syndromes were those with a history of cervical/uterine (1.46) and lung (1.39) cancer. The mean number was smaller for those who reported breast (1.23), colon (1.13), and prostate (0.85) cancer.

A meeting attendee commented that Dr. Mohile could point to associations only between cancer history and geriatric syndromes. "We do have significant limitations," Dr. Mohile said, noting that the study was cross-sectional, so causality could not be demonstrated.

"These aren't well coupled in causal relationships because of the methodology that was employed. We need better precision in the categorization of cancer treatment and sequelae in order to reach conclusions," said study discussant Dr. Jerome Yates of the American Cancer Society.

A very heterogeneous participant sample and a small number of patients with some of the cancer subtypes were other limitations, Dr. Mohile said. Timing also is important, she added: "Our study was a self-report of cancer, and cancer could have occurred 10 years or more" before the 2003 survey.

It would interesting to perform a prospective study, said Dr. Harvey Jay Cohen of Duke University Medical Center, Durham, N.C., who moderated the session.

Dr. Yates also noted that the data might have been distorted because beneficiaries with higher comorbidity might have been followed more regularly by their clinicians, and because the cross-sectional design would be less likely to include participants who died sooner rather than later following their cancer diagnosis.

"This is a good start, using the Medicare database," Dr. Yates added. "You are certainly on the right track, raising the right questions, and so that is very helpful."

Future research is needed to assess whether cancer and/or treatment causes geriatric syndromes in older cancer patients, Dr. Mohile said.

Dr. Mohile and Dr. Yates had no relevant financial disclosures. ■

THE EFFECTIVE PHYSICIAN

Geriatric Pain Management

BY WILLIAM E. GOLDEN, M.D., AND ROBERT H. HOPKINS, M.D.

Background

By age 75, most of the population has some frailty or chronic process associated with pain. The American Geriatrics Society recently released a literature synthesis and expert consensus on best practices for pharmacologic management of pain in this complex group of patients.

Conclusions

Assessing pain in the older population can be difficult because of impaired cognition, minimization, or communication difficulties. A number of standardized screening tools can be used to assist in this undertaking.

Pain may not always be eliminated, even by aggressive management. Effective comfort goals may be a more realistic target, given the side effects and limits of existing medications. When using long-acting agents, provision should be made for treating breakthrough pain with short-acting medications.

Gastrointestinal absorption may be unpredictable in older patients because of slower transit times, surgically altered anatomy, or the side effects of medications. Transdermal absorption is usually not affected by age.

An increased ratio of fat to lean body mass can result in a greater volume of distribution of fat-soluble drugs.

"Muscle relaxant" medications may inhibit polysynaptic myogenic reflexes in animal models, but their analgesic properties for muscle pain are unrelated to relief of muscle spasm.

Implementation

With its superior drug safety profile at lower doses, acetominophen is often recommended as a first-line agent for back and osteoarthritis pain. The 24-hour total dose should not exceed 4 g to minimize the risk of liver toxicity.

Nonsteroidal anti-inflammatory drugs have been associated with up to one-quarter of hospitalizations associated with drug toxicity; they should be used with caution because of potential toxicity to the renal, gastrointestinal, and cardiac systems. Patients receiving NSAIDs may have reduced GI toxicity if placed on proton pump inhibitors, high-dose H_2-receptor blockers, or misoprostol. Patients should not take more than one nonselective anti-inflammatory agent or COX-2 inhibitor.

Naproxen is often the preferred NSAID because of its lower risk of cardiovascular toxicity. Although the Food and Drug Administration has warned that ibuprofen reduces the cardioprotective effects of aspirin, outcome data to support this recommendation remain uncertain. Diclofenac has the worst risk profile for cardiovascular events. Ketorolac is not recommended for chronic use and has a significant profile for renal and GI side effects.

The increasing evidence of the multisystem toxicity of nonsteroidal agents has increased the prescribing of opioid analgesics in the elderly. Data demonstrate short-term effectiveness for multiple persistent pain states, but long-term data are not available. Opioids should be administered cautiously on a trial basis with a mutual understanding of the limitations of the therapy. There are recent data suggesting hormonal changes with long-term use that can result in fatigue, depression, and lowered libido. Close monitoring of side effects, patient behavior, and therapeutic effect are core aspects of opioid prescribing.

Cyclobenzaprine has a therapeutic and side effect profile identical to that of amitriptyline. Carisoprodol has been removed from the European market because of its potential for abuse. Neither provide pain relief from true muscle spasm. Both are associated with a greater risk of falls in the elderly.

Baclofen is useful for severe spasticity from a variety of neurologic conditions. Titrating from low doses can minimize potential for dizziness and somnolence. Abrupt discontinuation can induce delirium and seizures.

While tricyclic antidepressants have been used for neuropathic pain for years, their potential for cardiovascular and anticholinergic side effects limits their application in geriatric care. Serotonin norepinephrine uptake inhibitors (SNRIs) such as duloxetine and venlafaxine are good alternatives for neuropathic pain and fibromyalgia. The SSRIs such as fluoxetine, citalopram, sertraline, and fluvoxamine have not been shown to be effective in combating pain.

Later-generation anticonvulsant agents such as gabapentin and pregabalin affect the voltage-gated calcium ion channels to improve neuropathic pain with fewer side effects, compared with tricyclic antidepressants and older anticonvulsants.

Topical lidocaine is effective for localized neuropathic pain. Localized nonneuropathic pain may respond to topical nonsteroidal agents. Topical capsaicin cream can provide some benefit by depleting substance P over time (potentially several weeks). Nearly a third of patients cannot tolerate the burning sensation, which can persist for several months.

Corticosteroids can be useful for pain from chronic inflammatory processes. They should not be used for osteoarthritis.

Calcitonin, by an unknown mechanism of action, can be useful for osteoporotic fracture pain of the vertebrae and pelvis. Side effects include nausea and abnormal serum calcium and phosphorus levels.

Reference

American Geriatrics Society Panel. Pharmacological management of persistent pain in older persons. J. Am. Geriatr. Soc. 2009; 57:1331-46.

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