



Hyperpharmacotherapy in someone you love

Sarah Zarbock, PA-C

The four of us sat in the “Wellness Clinic”—an ironic name because the elderly woman to be evaluated was far from being well. She had been brought from her room in another part of the assisted living facility where she had resided for 4 months. The other three people in the room included a consulting psychiatrist, the facility’s nurse practitioner, and me.

This 86-year-old woman had been experiencing chronic painful neuropathy in her legs. The plan to control her pain at home had consisted of escalating the doses and frequencies of a variety of analgesic medications, culminating 3 months previously when she began using a fentanyl patch. The good news was that within 48 hours after the patch had been applied, her pain was obliterated. The bad news was that she began to lose ground mentally. She became more and more forgetful, which, as it turned out, was a harbinger of dementia and mood instability. Finally, unable to continue living at home, she was admitted to the local facility. Now her short-term memory was almost nonexistent.

The consulting psychiatrist performed the mental status exam, beginning with questions relating to orientation to person, place, time, presidents, and her name. The elderly woman could articulate only her first name and, with considerable prompting, the name of the facility. The physician segued to a much easier question: “Can you point to the ceiling?” She looked at all of us staring expectantly at her, but she said nothing. The psychiatrist repeated the question several times, but the patient, looking rather dazed, neither moved nor spoke. The physician backtracked and repeated the question about where she thought she was. This time, the woman responded, “I don’t know.”

This was an intriguing case—especially puzzling because this woman had been in general good health for her age but had experienced a slow and steady mental decline. Once a somewhat forgetful but active participant in her life, she had relentlessly deteriorated to the point where she was now compromised almost to the point of incapacitation. What was happening? I could

have remained merely interested and curious about the cause of this patient’s clinical condition except for one key fact: This woman was my mother. I sat, stunned, looking at a familiar figure who had been transformed into someone I barely recognized.

Locating the culprit

I had been struggling to understand and accept my mother’s illness. Although her family doctor and the staff at the facility diagnosed dementia and explained why my mother would require long-term care, a piece of the puzzle was missing. All of this had happened so fast. At the beginning, she was able to walk into the facility and to carry on sensible conversations with those around her. Now, 3 months later, she required a wheelchair and apparently didn’t know up from down.

After doing my own investigation, I was fairly sure that the patch, although probably not the entire problem, had contributed significantly to my mother’s mental deterioration and needed to be discontinued. Yet I couldn’t convince anyone, including my mother’s physician, that the patch should be removed, even on a trial basis. It was for this reason that, out of sheer frustration, I asked the psychiatrist to evaluate my mother.

Sitting in that room, I felt divided. On the one hand, as a PA I felt confident that the fentanyl patch was substantially responsible for my mother’s dementia. But I was also a daughter who was witnessing deterioration in someone I loved. I was sure that I was seeing a severe drug-related adverse effect and, because I was a PA, I believed I could actually do something about it. I was knowledgeable enough to describe the problem to her various practitioners and could also recommend, at the very least, a temporary solution—take off the patch and provide alternative analgesia.

I remembered what it was like to be a clinician and have family members of patients tell you what they thought was wrong and, in some instances, what they thought you should do about it. How ironic to find myself in a similar situation. Yet does anyone know someone better than a family member does? It’s almost as if there is something like “familial intuition,” a source of incredibly

The author is the editor in chief of JAAPA.

valuable information that needs to be factored into the problem-solving process. I felt especially qualified, as a daughter and a PA, to speak on my mother's behalf. I was finally able to arrange an evaluation by an outside psychiatric consultant, who agreed to remove the patch and arranged for concomitant and effective analgesia. Within 48 hours after these changes were made, my mother turned to me and, although still somewhat confused, said, "I feel like I'm coming out of a nightmare."

Tools to avoid hyperpharmacotherapy

This experience gave me renewed respect for the powerful effects medications can have, especially in the elderly. Interestingly, it also coincided with the publication of a *JAAPA* article by Drs Bushardt and Jones, "Nine key questions to address polypharmacy in the elderly."¹ The authors describe questions to evaluate medical management in the elderly patient, in addition to raising awareness of the potential dangers of what they call "hyperpharmacotherapy" (preferred over the word "polypharmacy" since the latter can be confused with the use of multiple pharmacies). Their goal is to assist clinicians in helping their patients avoid medication-related problems. Nothing more clearly drives the point home about the adverse effects of medication than when you see it firsthand in a family member. I felt compelled to tell my mother's story to demonstrate what could have been a permanent disastrous outcome.

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My further research on the topic led to a variation on the nine-question format called the NO TEARS tool.² Using this handy mnemonic, a clinician can perform an efficient review of a patient's medications in approximately 10 minutes. It is easy to remember and can be readily assimilated into the process of providing patient care.

- **N: Need** Clinicians can minimize hyperpharmacotherapy by using only the medications that have been shown to be effective in treating a certain disease and condition. Is the treatment still indicated, and if so, is the dosage and administration schedule correct? Is this medication still indicated as long-term therapy?
- **O: Open questions** By using open questions, the clinician can find out what medications the patient is taking. "Can you tell me what your medications are so that I can check that they match our treatment

plan?" "I realize that sometimes patients think they no longer need a medication. Do you have any that you're unsure of?"

- **T: Tests** Are further tests needed to assess the status of the disease in order to determine whether medication is still needed? Are there new methods that are preferable in evaluating a patient's progress? Patients are often seen by several providers, but don't assume that another provider has done the tests you need. It's equally important to avoid duplicating tests that have been done by someone else.
- **E: Evidence** With the ever-expanding knowledge provided by evidence-based medicine, practitioners need to be up-to-date on research findings and treatment guidelines. Has new evidence made it necessary to change treatment for a patient with a longstanding chronic illness? Is current therapy suboptimal, or are there adjustments to be made to incorporate new medications?
- **A: Adverse Effects** As my story illustrates, it is crucial—and perhaps lifesaving—to recognize when symptoms are side effects of medication. Periodically asking patients to bring in all of their medications for you to review is a real-time check-up. Also review treatment for duplications and interactions, remembering to ask about OTC drugs and herbal remedies.
- **R: Risk reduction** Although reducing risk is an important goal in all patients, the elderly are at particular risk of falls. This risk can be exacerbated by some medication side effects, such as postural hypotension and unsteady gait. Can another medication, one that doesn't have these side effects, be substituted?
- **S: Simplification/switches** Determine if it's possible to simplify the medication regimen. In the elderly, the combination of taking multiple medications and being less able to keep track of them can make some therapy impossible to follow. For instance, can a regimen be simplified by changing from twice-daily to once-daily dosing? Such a regimen may be just as effective and also improve compliance.

Although my mother is in amazingly good physical health, she still has some degree of dementia that, I believe, will probably worsen with time. Still, there is a possibility now that she may come home because she has improved enough for my father, with outside assistance, to be able to care for her. He chuckled the other day when he said to me, "Well, I guess that money we loaned you to go to PA school 25 years ago really came in handy." Smiling, I replied, "You got that right!" □

REFERENCES

1. Bushardt RL, Jones KW. Nine questions to address polypharmacy in the elderly. *JAAPA*. 2005;18(5):32-37.
2. Lewis TL. Medication review for the 10-minute consultation: The NO TEARS Tool. *Geriatrics & Aging*. 2005;8(6):43-45. Available at: <http://www.medscape.com/viewarticle/507000>. Accessed August 2, 2005.