Treating BPSD in the ED: Is there a better way?

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Introduction

s an emergency nurse, you develop a sense of atmosphere without knowing all the details. You can feel, as you enter the department, the buzz of several emergencies being dealt with at once, or the anticipation of a case just called in by the paramedics. As a Geriatric Emergency Nurse (GEM), I am removed from much of that immediate urgency, but the awareness remains.

Recently, I was aware of this ambient tension when a senior from a long-term care facility was sent to us with Behavioural and Psychological Symptoms of Dementia (BPSD). On hearing of the imminent arrival, there were, in addition to making sure I knew of this priority, anxious concerns about the facility accepting the patient back, the need to avoid a lengthy hospital admission, and the need to call the case manager in the community. All this before the patient arrived!

In contrast, when the department anticipated an unknown number of casualties from a chemical exposure, the "buzz", while intense, felt controlled and focussed. Staff was delegated to obtain necessary information on appropriate decontamination procedures, procurement of antidotes, and availability of ICU beds. How is it that one patient stresses several experienced emergency practitioners, while anticipation of several casualties only sets into motion the necessary preparations?

Dementia is a significant progressive disease in the senior population. In 2011, 747,000 Canadians, nearly 15% of our population 65 years of age and older, were living with Alzheimer's disease and other dementias. The risk for dementia doubles every five years after the age of 65, with implications for health care, as the population ages (Alzheimer Society of B.C.). Dementia typically affects cognition, function and behaviour. The behavioural changes experienced by more than 90% of persons with dementia are the most difficult of the symptoms to manage.

Behavioural and Psychological Symptoms of Dementia, commonly abbreviated to BPSD, refers to the non-cognitive symptoms of dementia. These can result from neurotransmitter changes of the disease, as well as impairments of communication and challenges of the environment. For example, it is not uncommon for a person with dementia to believe others are entering her home and taking items that she can no longer find, and these people frequently suspect spousal infidelity. Changes in her environment, such as being moved from home to hospital, as well as difficulty hearing and seeing, may further overwhelm her understanding and ability to cope, resulting in agitation and aggression. Other manifestations include behaviours such as wandering or hoarding, which can be difficult for family members or other caregivers to deal with, but seldom result in visits to the ED.

Our case

Mr. R. was diagnosed with mixed Alzheimer's and vascular dementia seven years ago. Until 18 months ago, he lived with his wife in the home they had built as they started their family. With their son, daughter, and families providing meals, transportation, and housecleaning, the couple were able to fulfil their desire to stay together in the home they loved, but when Mrs. R. fell and died a few months later of complications, Mr. R. struggled. His family noted he was unable to heat the meals they left and spilled his medications, but he would not consider any help. He suspected his children of stealing his possessions, and believed strangers lived in the basement, also misappropriating items (nearly all of which were located by family when they visited). He began to call his daughter many times each day, forgetting they had just spoken. When the calls became frequent in the early morning hours and he began calling the police, the family made arrangements for him to be moved to a care facility. Mr. R. had refused any home health supports, including Adult Day Programs, and when, after a wait of several months, he was moved to the facility, the sudden change in location and the multitude of staff and residents were profoundly upsetting. He could not remember anyone telling him anything about this change and he wanted no part of it.

No one in his family, exhausted from several months of intense caregiving, as well as their ongoing work responsibilities, was prepared for this reaction. Afraid to take him out for fear he would not be accepted back in the facility, and unsure what to do, they left to avoid upsetting him further.

When Mr. R. hurled a lamp at a frail woman unsteadily walking by with her walker the staff were taken aback, not anticipating such an outburst. As Mr. R. concentrated on finding a way out, the staff called emergency services. Because Mr. R. had been managed at home by his family, his physician had not known of any need to prescribe medication for his agitation, nor was she available at this time.

The paramedics were able to talk with Mr. R., convincing him they were there to help him, and providing him with one-on-one attention. He walked with them to the ambulance.

Mr. R. was not expecting the ED to be his destination. Calm on arrival, within minutes he reacted with fear, aggression, and attempts to leave.

Best practices for care of persons with dementia and BPSD often emphasize the importance of anticipating and avoiding overwhelming situations. Many persons with advanced dementia reside in long-term care facilities, and the benefits of this approach are clear in helping those with dementia live as comfortably as possible. Generally the staff know the preferences of each resident, plan for appropriate types of activity, avoid demands that the resident finds overwhelming, and provide a safe, secure environment. When such an approach is not sufficient, and the resident responds with aggression, emergency responders are called to provide care and to transport the individual to the ED.

In the emergency department, the initial goals of treatment are to provide safety for this patient, other patients, staff and others, and to allow examination to determine if medical causes, including delirium, are contributing to this behaviour. Thus, we need to provide necessary physical and medical restraint with ongoing monitoring and management of symptoms and side effects. A calm, positive approach with decreased stimulation may help. Attention to any reversible causes of discomfort may also decrease this patient's reaction. Offering food or fluid, toileting or changing wet incontinence pads may help, but we need to anticipate the need for medication.

Initial medical management includes administration of an antipsychotic and, often, a benzodiazepine. Appropriate medications include Haloperidol 0.25-0.5 mg po or IM q 2-4 h prn, to a maximum of 2 mg. or Loxapine 2.5-5 mg po or IM q 2-4 h prn, to a maximum of 10-25 mg. Lorazepam 0.5-1 mg sl, po or IM q 2-4 h prn in addition to the antipsychotic may allow a reduced dose of each medication. For patients with Parkinson Disease (PD) or Dementia of Lewy Body Disease, Quetiapine 12.5-25 mg bid prn is a safer choice of antipsychotic but, if not available, lower doses of other antipsychotics could be used with careful monitoring for side effects including worsening of parkinsonian symptoms.

When the patient has settled sufficiently, a thorough physical examination is needed to identify any medical conditions, injuries, or lesions that need treatment. Constipation or a urinary tract infection could be contributing to this change in behaviour. It will be difficult to absolutely determine if delirium is a factor, so we must treat for this until we can be confident it is not present. The above medications are indicated but, as with other medications for seniors, "start low and go slow" if ongoing delirium is suspected.

A review of the patient's current medications is needed to identify any that could be contributing to the behaviour, such as anticholinergics. Any recent changes should also be noted, as well as what regular medications need to be continued, for example, analgesics or medications for PD.

At this point, it may be necessary to contact the patient's facility to obtain further collateral information. Not surprisingly, information that was conveyed during the emergency may not have been complete. At such times, emotions tend to be strong: the patient is reacting in fear; staff there are overwhelmed with trying to contain this resident, as well as keeping all others safe; the perception in the ED is sometimes less than collegial toward the facility staff; and the ED staff may be feeling overwhelmed in trying to improve this person's symptoms.

We need to clarify which behaviours need our attention. For example, there may have been a recent history of increasing paranoia or hallucinations that requires further assessment. Nursing staff at the long-term care facility will need reassurance that there is a medication regimen to address the safety issues that precipitated this visit. It is unlikely to be a successful discharge if this patient is sent back immediately following the initial doses of medication. On the other hand, a complete refusal to consider taking this person back is rarely in the patient's best interests.

Having given appropriate medications and provided the best environment and comfort we can in the ED, we anticipate the patient is no longer so agitated and aggressive. Indeed, by the time the medication is effective, the patient may be over-sedated for a period. Initiate fall and injury prevention measures, such as non-slip socks and hip protectors; adjust the height of the bed to the patient's knee level; assist to toilet regularly; and encourage regular nutrition and fluid intake.

Ongoing care will generally include medical therapy for several weeks following an acute episode of BPSD. Atypical antipsychotics offer some benefit to many of these patients, but also carry risks including sedation, increased falls, stroke and death. Anti-depressant medications may be effective in reducing symptoms of anxiety, depression and agitation. Most of these patients are not able to comprehend their situation adequately to give or refuse consent, so appropriate substitute decision-makers must be identified and informed of risks and benefits of proposed therapies. As some symptoms of BPSD may decrease with progression of dementia, the need for ongoing medication must be re-evaluated at intervals, initially after six weeks and subsequently every few months. For patients such as Mr. R. whose symptoms were precipitated by a move, short-term medication and ongoing non-pharmacological measures may be sufficient.

As with many conditions for which seniors come to the ED, we do not provide the definitive treatment. Rather, we ensure safety, assess for reversible conditions and treat these. We consider the comorbidities involved in the individual's care and refer to the patient's primary care provider or hospitalist for ongoing care, as needed. As part of the ongoing care team, we contribute to the safety and comfort of some of our most vulnerable patients, those experiencing BPSD. By responding compassionately and knowledgably to their needs, we help to calm them and reduce the stress in the ED.

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