

Managing Challenging Behaviors in Hospice Patients with Dementia: A Retrospective Chart Review and Descriptive Analysis of a Unique Hospice Palliative Care Unit Specializing in Dementia Care



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Introduction

Behavioral/Psychological symptoms are experienced by almost all patients with dementia, and are unfortunately particularly difficult to manage and weigh heavily on caregivers and health care professionals. Given the current demographics of an aging population and a lack of effect treatment options, dementia is serious problem and is expected to continue to be a problem for the foreseeable future. [5] Hospice patients with a primary dx of dementia often have severe symptoms which do not respond to simple interventions. There are currently no FDA approved medications for the management of behavioral symptoms in patients with dementia. Of the data that does currently exist, it is suggested that behavioral symptoms in patients with dementia should be managed without drugs whenever possible, as treating patients with dementia with antipsychotic drugs have been shown to increase risks for falls, hospitalizations, and death [1]. However there is a lack of many real life examples or descriptions of this care being carried out in the settings that often care for these patients.

The most prevalent school of thought suggests that there doesn't seem to be a "one size fits all" method for treating behavioral symptoms in patients with dementia, but that pharmacologic treatments should be carefully considered in regards to the pros and cons/risks involved. Specifically, a 2015 review article in the BMJ, suggests that non-pharmacologic interventions should be first line, focusing on unmet needs, environmental factors and triggers, interactions, caregiver factors, pain/discomfort, and underlying neurobiological related disease factors [2]. It is clear that this is a difficult topic of research without clear direction in how to best manage these symptoms. Gardiner Home, specializing in care of those with dementia and behavioral issues, provides a unique opportunity to enhance this knowledge.

Research Question / Objectives

The goals of this project were two-fold:

1. Review admissions from the last 5 years to better understand and explore the management of such behaviors using pharmacologic and non-pharmacologic interventions in this setting.
2. Describe the specialized in-patient hospice unit model and explore larger implications of this type of center.

Methods

The site of this study was a specialized in-patient palliative care unit focused on providing care for patients with dementia and behavioral problems, Gardiner Home. We reviewed 102 charts for Generalized Inpatient (GIP) Admissions of patients with a primary diagnosis of Dementia over a 5-year period from 2013-2017. Charts were reviewed initially by a trained research assistant and a 3rd year medical student, and then reviewed a second time by the Principle Investigator-A Hospice and Palliative Medicine boarded physician. Pharmacologic and Non-Pharmacologic interventions were recorded, and outcomes measured (length of stay for GIP care, eating habits, ambulation, date of death). This data was then input into a review form that described each patient and the course of individual patients as well as aggregate group data about use of pharmacologic management, non-pharmacologic interventions, length of GIP stay, and date of death in relation to admission. Admissions were categorized by GIP reason (Hitting, Screaming, Paranoia/Delusions/ Hallucinations, Insomnia, Pain, Agitation). Within those categories, the percentage of admissions using the intervention was calculated. For pharmacologic interventions, we included the average daily doses (+/- 1 SD) and number of GIP days the medication was given for.

Results

Average age 83.5 +/- 7.6 yrs. 55 males, 47 females. Out of 102 admissions, behaviors leading to admission were agitation (62), pain (53), hitting (37), screaming (35), paranoia/hallucinations (34), and insomnia (20). Psychoactive medications used were antipsychotics (76%), benzodiazepines (36%), morphine (86%), trazodone (42%), and antidepressants (33%), with no clear patterns of use with different behaviors. Non-pharmacologic interventions were documented for 77% of admissions. 51% of patients died within 2 weeks of admission, with pain and screaming most strongly associated with mortality (66% of each).

For all 102 admissions:

- Antipsychotics were given 76.5% of the time, average dose: 4.4 mg Haldol +/- 3.5 mg for 3.75 GIP days
- Benzodiazepines were given 36.3% of the time, average dose: 3.74 mg Lorazepam +/- 5.95 mg for 3.5 GIP days
- Morphine Equivalents (MSEq) 86.3% of the time, average dose: 26.88 MSEq +/- 28 MSEq for 4 days
- Non-Opioids were given 52.9% of the time, Tylenol average dose 1680 mg +/- 860 mg APAP for 3.75 GIP days
- Trazodone was given 42.2% of the time, average dose 85 mg +/- 65 mg for 3.75 GIP days
- 33.3% of patients were treated with an Antidepressant
- 3.9% of patients on an Anticholinergic medication
- Non-Pharmacologic interventions were documented for 77.5% of admissions
- Average length of GIP stay: 5.5 +/- 2.5 Days, 77.5% stayed at facility for less than 2 weeks, 51% died within 2 weeks of admission.
- Of patients admitted with GIP-pain as well as behavior symptoms(53 admissions), 66% died within 2 weeks of admission.
- In 5 year period, Hospice Census rose due to increase in dementia patients (less than 20% to 30% of census)

Implications

To our knowledge, this is the only hospice inpatient unit in the country devoted to managing behavioral symptoms in patients with dementia. Despite that, there is still significant room for improvement in pharmacologic intervention, documentation surrounding non-pharmacologic interventions, as well as how to best quantify behavior symptoms and the responses from interventions. These findings are now being applied to patients in other inpatient units and facilities with future plans to study interventions more directly/in a prospective manner. We believe that this knowledge will be beneficial to other hospices as well as contributing to the foundation for future studies surrounding managing behaviors in patients with dementia.

Summary/Conclusions

- Analysis of pharmacologic interventions, primarily with antipsychotics, benzodiazepines, and opioids, were used often without clear patterns, and often with the effect of subjectively noted sedation rather than desired outcome.
- Non-Pharmacologic interventions were not documented on close to 25% of patients despite almost 100% universal "real-world" usage.
- Having a specialized facility for caring for patients with dementia may allow hospices to meet the rising prevalence of dementia.

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Review Tool Example: Figure 1.

Pt ID	ONE LINER	Inc Use "Big 3" Flag	GIP Reason						Antipsychotic Used	Avg Daily Amount (haldol equivalents)	# of GIP days given	If Died at GH Haldol over last 72 hours
			Hitting	Screaming	Paranoia / Delusions / Hallucinations	Insomnia	Pain	Agitation				
1	71 y/o F Lewy Body Dementia, Admit from Home				x	x		x	None	0	0	N/A
2	90+ y/o F transfer to GH after fall with tibia fracture	x						x	None	0	0	N/A
3	88 y/o F transfer from Hospital		x		x				Haldol	2	4	N/A
4	83 y/o M s/p craniotomy for cyst drainage			x		x		x	Haldol	5	5	N/A
5	73 y/o F c COPD, constipation, non-healing abdominal surgical wound				x		x		Haldol	2	6	N/A