# **Agnosia Interferes With Daily** Hygiene in Patients With Dementia

Gerontology & Geriatric Medicine Volume 4: I-8 © The Author(s) 2018 Reprints and permissions: sagepub.com/journalsPermissions.nav DOI: 10.1177/2333721418778419 journals.sagepub.com/home/ggm



R. C. Hamdy, MD<sup>1</sup>, A. Kinser, PhD<sup>1</sup>, J.E. Culp, BFA<sup>1</sup>, T. Kendall-Wilson, RN<sup>1,2</sup>, A. Depelteau, PhD<sup>1</sup>, **R.** Copeland,  $MD^{1}$ , and K. Whalen,  $BA^{1}$ 

# Abstract

Patients with dementia, particularly Alzheimer's disease, may not recognize that their clothes are dirty. They may see the food stains and discoloration of the clothes and yet because of their agnosia are unable to integrate these observations and deduce that their clothes are dirty and need to be changed. They will, therefore, resist attempts to get them to change clothes, especially if these clothes happen to be their favorite ones. This often causes caregivers to become frustrated, especially, if it represents a change in the patient's previous habits of only wearing clean clothes. In this case study, we present a 72-year-old woman with moderate Alzheimer's disease who lives with her daughter, who adamantly refuses to change the clothes she has been wearing for a few days and which are now clearly dirty. We report the interaction, highlight what went wrong in the patient-daughter interaction, and discuss how the catastrophic ending could have been avoided or averted.

# **Keywords**

Alzheimer's / dementia, caregiving and management, cognition, decision making

Manuscript received: October 10, 2017; final revision received: February 23, 2018; accepted: April 26, 2018.

# **Objectives**

At the end of this scenario, readers will appreciate the following:

- 1. Because of their agnosia, patients with Alzheimer's disease may not be able to recognize that the clothes they are wearing are dirty and need to be washed or replaced.
- 2. Agnosia is often aggravated by impaired vision and sense of smell, which further interfere with the patients' ability to recognize their clothes are dirty.
- 3. Attempting to convince patients that their clothes are dirty and, therefore, need changing is rarely successful. Arguing with patients who have dementia is futile, as they are unable to retain the essence of the argument. Arguments, therefore, should be avoided as they frequently escalate to confrontations, often with catastrophic endings.
- The patients' easy distractibility and short atten-4. tion span can be used to divert their focus and get them to willingly change clothes.
- 5. Once the patient undresses, dirty clothes should be removed from the patient's sight as soon as possible. The sight of the dirty clothes may trigger

the patient to want to put them back on because they may not recognize the clothes are dirty.

6. If the patient has favorite clothes, caregivers may want to purchase duplicate sets to use when one set is being washed. Alternatively, clothes could be washed when the patient is asleep and not wearing that particular outfit.

# **Case Presentation**

# Characters

- Ellie, 72 years old, has moderate Alzheimer's disease ([functional assessment staging test] FAST Stage 5) diagnosed about 1 year ago. She lives with her daughter.
- Susan is Ellie's daughter.

<sup>1</sup>East Tennessee State University, Johnson City, TN, USA <sup>2</sup>Alzheimer's Tennessee, Inc., Cookeville, TN, USA

#### **Corresponding Author:**

K. Whalen, Department of Geriatric Medicine, East Tennessee State University, Box 70429, Johnson City, TN 37601, USA. Email: Whalenk@mail.etsu.edu

0 😒 Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (http://www.creativecommons.org/licenses/by-nc/4.0/) which permits noncommercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and Open Access pages (https://us.sagepub.com/en-us/nam/open-access-at-sage).

#### Scenario

Ellie has been wearing the same dress every day for the past 2 weeks. For the past 3 days, Susan has been trying to get her to put on a different dress without success. Ellie categorically states that she likes the dress she is wearing and does not think it needs washing.

Susan decides she cannot bear her mother wearing filthy clothes any longer. She walks into her mother's room while Ellie is still in bed. "Here Momma, I got you a clean dress: the green one you love. I want you to put it on after you wash." Susan hangs the clean dress on the clothes hanger, picks the old dress and lays it on the laundry basket. "You've been wearing this dress for over 2 weeks now. It is dirty and stinks. You always like to look and smell nice, so I'll wash it later."

Ellie does not respond. She gets out of bed, goes to the bathroom, washes, and then returns to her room. She looks at the green dress her daughter left on the clothes hanger, then looks at the dress on the laundry basket, picks up the latter, puts it on, and goes to the kitchen. Susan notices her mother wearing the same dirty dress and becomes upset.

Momma, what are you wearing? Susan asks. "I just put a pretty clean dress on your clothes hanger for you to wear, the green one, remember? Can't you see that this dress you are wearing is dirty and even smells bad?"

Ellie replies that she thinks it is a beautiful dress. Susan agrees but says it is dirty, pointing out that Ellie has been wearing it every day for the past 2 weeks and that the dress needs to be washed. "I told you this morning to put on the new dress I left in your room, and not this old dirty dress you're wearing," Susan says in frustration. "Now go to your room and put on the dress I left on your bed."

Unmoved, Ellie reiterates her affection for the dress. Susan agrees again that it is a nice dress but tells Ellie that she cannot wear it as it is dirty. "Just let me wash it today," she implores, "and then you can wear it after that." Ellie disputes the issue, saying that she neither finds the dress dirty nor of any need to wash it. "I am quite happy with it as it is," she says with resolve. Susan persists, telling Ellie that Steve and his wife are coming to visit and that she cannot wear the dress today. "What do you think they'll say when they see you wearing an old dirty dress when you usually look so nice?" she asks.

Ellie does not accept Susan's assessment and tells Susan that the dress only needs pressing. Susan cannot imagine how Ellie can continue wearing the same dirty dress. "Can't you see the stains? Here, look at this stain just under your chin," Susan asks as she pokes her finger on her mother's chest. Susan is growing angry. Poking her again about 2 inches lower, Susan tells Ellie that one of the stains looks like an old egg stain that has rotted, and pokes her a third time to show her a coffee stain. "Momma, you cannot keep wearing this dress! Take it off and let me wash it!"

Ellie stands firm that the dress is fine. "You are just imagining things. I don't know why you don't want me to wear this dress. It's beautiful. I like it and I'm wearing it." Susan is becoming desperate. She points out that the dress even smells bad and that she cannot imagine how her mother cannot smell how unpleasant the dress has become. But Ellie calmly replies, "I actually think it smells nice and fresh."

Susan raises her voice, demanding that her mother take the dress off and put on the clean one she left on Ellie's bed. But Ellie will not budge. "No, I will not," she says petulantly. "I like this dress and I'm not going to change it. End of conversation."

Again attempting to convince her mother by playing on Ellie's history of being concerned about appearances, Susan asks her what Steve and his wife will think when they see her wearing that dirty dress? But Ellie is unmoved. "I couldn't care less what they think. I like this dress and will wear it. Besides, it is not dirty."

Susan is at her wit's end.

Momma, I'm just trying to get you to look respectable in a clean dress. I'm sick and tired of taking care of you and dealing with all of your tantrums. You are not making life easy; you are making it more and more difficult! I just don't think I can continue taking care of you!

The argument continues and grows increasingly heated. Susan tries to forcibly undress her mother. Her mother resists. Susan persists and in the process rips one of the sleeves. Her mother shrieks, "See what you have done you clumsy little bitch! You tore my favorite dress!" She slaps her daughter. Susan shouts back "How dare you call me a bitch!" and, without thinking, slaps her mother back.

Susan now sees blood streaming down her mother's face from the nose and mouth where she hit Ellie. "Oh dear God, what have I done?" she laments. "I'm so sorry Momma! I didn't mean to hurt you. Please forgive me." Ellie is in tears, she is hurt, and blood is streaming from her mouth and nose and onto the dress and floor. Catastrophic ending.

#### **Case Analysis**

# Turning Points: What Went Wrong? Could It Have Been Avoided or Averted?

Agnosia is one of the cardinal features of Alzheimer's disease. Ellie is unable to integrate visual stimuli (stains and wrinkles on her dress) and olfactory stimuli (smell of the dress) to conclude that the dress is dirty and that she should not wear it until it is washed. She is not trying to be difficult or stubborn. She just does not recognize the seemingly simple fact that her dress is dirty and that, therefore, she should not wear it.

Ellie, because of her impaired memory for recent events, probably does not even remember that she wore that dress for several days, and, therefore, cannot understand why her daughter is so adamant about changing her clothes. She probably feels that her daughter is just being capricious and bossy. This feeling is probably reinforced by paranoid delusions, often seen in patients with Alzheimer's disease.

It is, therefore, pointless for Susan to continue trying to convince her mother that her dress is dirty. There is no way to convince Ellie because she is unable to process the various sensory stimuli. Instead, Susan needs to find an alternative strategy to get her mother put on another clean dress while the favorite dress is washed.

Several turning points contributed to the catastrophic ending of this episode:

1. Susan's opening remarks were not appropriate.

Susan's opening remarks set the scene for a confrontation. She did not even greet her mother or wish her a good morning when she walked into her room. Instead she just issued an order: "Here Momma, I got you a clean dress. . . I want you to put it on after you wash." Ellie was still sleeping when Susan walked into her room and issued the orders. That is not a good start for the day, especially for patients with dementia, as it may set a confrontational, antagonistic tone for the rest of the day.

*Could it have been avoided*? Susan should have first cheerfully and affectionately greeted her mother, asking her whether she had a good night sleep, wishing her a good morning, and asking her if she would like a cup of coffee, tea, or juice. After kissing or hugging her mother, Susan could have sat on the bed beside her mother for a few minutes, may be held her hand and emphasized some positive aspect of the day: "It's such a beautiful day outside, aren't we lucky with the weather? Are you looking forward to meeting Steve and his wife later today?" Emphasizing positive aspects and getting her mother in a good mood may set the tone for the rest of the day.

 Susan did not capitalize on the anticipated positive event of the day: the visit of her brother Steve and his wife. Mood can be contagious.

Given Ellie's poor memory, she probably forgot that her son and daughter-in-law were visiting later that day. Susan could have capitalized on this event and get her mother to share in the excitement:

Do you think they'll tell us that they are relocating closer to us? Or that they're expecting one of their children to get married? Can you remember when they were last here? I'm so excited; I can't wait to see them again. I hope they'll come very soon. Aren't you excited? 3. Ask; do not tell: Susan told her mother that she wants her to put a new dress on.

Susan did not ask her mother, she told her to put on a different dress. In other words, she issued a direct order to her mother. This is a bad start for the day, especially as Susan should know that her mother is emotionally attached to the dress she has been wearing for the past 2 weeks, and that it would be difficult to get her mother to put on a different one.

*Could it have been avoided*? Instead of telling her mother that Susan wants her to put on a different dress, Susan should have come up with another good reason why a different dress is needed. She may for instance have said, "Momma, it's such a beautiful day outside, let's go for a walk after breakfast. Here, I got you one of your favorite outdoor dresses. How about you put it on and join me for breakfast?" Or, "Momma, Steve and his wife will be joining us later today. I thought you may want to wear a dress they have not seen before. How about this one?"

In these alternative approaches in addition to being asked rather than told to put on a different dress, there is no mention that the dress is still dirty. The entire episode would likely have been avoided.

4. Avoid triggers: Susan left the dirty dress on the laundry basket, an important trigger.

Susan needed to be aware that leaving the dress on the laundry basket would be an invitation to her mother to put it on again. Knowing that it was her mother's favorite dress and observing that her mother could not comprehend that it was dirty, Susan needed to recognize that the dress on the laundry basket would be a temptation Ellie could not resist.

*Could it have been avoided?* Susan should have taken the dirty dress out of her mother's room, thereby, eliminating the main trigger that generated the episode. Knowing that her mother is emotionally attached to the dress she had been wearing for the past 2 weeks, Susan should not have left it on the laundry basket within Ellie's field of vision.

Given that patients with Alzheimer's disease have a poor memory for recent events, it is probable that Ellie would have not even noticed that her favorite dress was gone. Without visual stimulation, it is possible Ellie would have forgotten all about that particular dress. Had Susan left only the clean dress prominently displayed, Ellie probably would have put on the only dress that was visible and the entire episode could have been averted.

5. Avoid reprimands.

Given their paranoid delusions, patients with dementia are very sensitive to reprimands. In this case scenario, not only does Susan first tell her mother to put on a new dress, she then reprimands her, "I told you this morning. . . Now go to your room and put on the dress I left on your bed." Apart from being a total reversal of the mother–daughter relationship, in this part of the interaction, Susan is actually reprimanding and ordering her mother. Both resonate negatively with patients who have dementia, especially Alzheimer's dementia, and set the scene for more confrontations.

*Could it have been avoided?* The easiest, least traumatic solution to that situation is just to accept it: accept that Ellie is wearing a dirty dress and move on. There is no need to make a big issue about it. If Susan felt strongly about the impression this may give her brother and sister-in-law, she could mention that Ellie is very keen to wear this particular dress and would not even consider wearing another one Susan also can mention that she plans to wash that dress tonight when Ellie is asleep.

6. Avoid arguments: Do not argue with patients who have Alzheimer's disease.

Patients with Alzheimer's disease have an impaired memory for recent events and a short attention span. They are, therefore, unable to successfully participate in an argument; it is pointless to argue with these patients. In this particular case, the basic premise of the argument is whether or not the dress is dirty. The convincing facts, however, are based on the recognition that the dress is dirty because of the stains, wrinkles, and smell, which, when integrated, can only lead to the conclusion that the dress is dirty. Patients with Alzheimer's disease, however, are not able to integrate these various stimuli and conclude that the dress is dirty: they suffer from agnosia. Convincing the patient is just not possible because of the inability to integrate the visual and olfactory stimuli and reach the conclusion that the dress is dirty and needs to be washed, in addition to the impaired memory for recent events and short attention span.

*Could it have been avoided?* Rather than continuing with the argument, Susan should have found an alternative way of getting her mother to put on a different dress. For instance, she could have said, "Momma, it is rather chilly (or hot) outside. I think you'll be warmer (or cooler) with this dress." Or, "Steve and his wife are coming later today. Why don't you put on a dress they have not seen before?" Or,

Momma, you look absolutely great in this dress, but you know there is an ugly stain on the sleeve. Why don't you let me wash it? It would only take a few minutes. Here, put on this dress in the meantime.

Susan could then have handed her mother the dress she wants her to put on, emphasizing that it will only take a few minutes to wash that stain away and that Ellie could have her favorite dress back in an instant. The entire episode could have been avoided.

7. Is there only one "favorite dress"?

Had Susan suspected that her mother had a "favorite dress," she could have purchased another identical one for her mother to wear while the dirty one is being washed. Under these circumstances Ellie would have all the time thought that she is wearing her "favorite dress" and is not aware that in fact there are two identical dresses. It is nevertheless possible that as time goes by, the status of "favorite" dress may be attributed to another dress.

*Could it have been avoided?* Susan may have washed the dress while her mother was asleep and without the patient even noticing it. Alternatively, having duplicates of favorite dresses would make it easier to wash the dress that is dirty without upsetting the patient. Before buying duplicate dresses, however, caregivers must remember that the status of "favorite dress" is often fleeting and ever changing.

8. Caregivers should remain calm at all times. This could be very difficult, almost impossible but is essential.

When repeated attempts to convince her mother failed, Susan lost her calm. Although providing care to someone who has dementia can be, and often is, exasperating; remaining level-headed and in good spirit is key to the effectiveness of these interactions. Recognizing the patient's limitations should be a catalyst for using alternative strategies, such as those discussed here.

*Could it have been avoided?* It is truly necessary for caregivers to try to remain calm and not show signs of being upset, irritable, or anxious about their interactions with dementia patients. Signs of irritability, anger, or anxiety are contagious. Patients can pick up on these signs and become angry, irritable, and anxious. As a result, the interaction rapidly escalates and may lead to a catastrophic outcome. To avert such an outcome, caregivers may have to momentarily walk out of the situation (provided the patient is safe left alone) so they can remain calm rather than contribute to the escalating tension.

9. Caregivers should reassure the patient and show love and affection.

Patients with dementia especially Alzheimer's disease, dementia with Lewy bodies, and fronto-temporal dementia often have paranoid delusions of feeling plotted against, unwanted, and not loved. In this case scenario, Susan walks into her mother's room in the morning and immediately hands her a dress that Susan wants her to wear. This is bound to elicit paranoid feelings in her mother: "Why does she want me to put on that dress? What is she up to?" Ellie is likely to be resistant to changing her clothes from the outset.

*Could it have been avoided*? As already mentioned above, it would have been better had Susan initially warmly greeted her mother, wished her a good morning, hugged or kissed her, and talked for a little while before addressing the issue of the dress. This may have allayed any anxiety and may have prevented the catastrophic ending.

10. Caregivers should enlist help from other caregivers.

Providing care to a patient with dementia is a very demanding and physically, mentally, and emotionally draining task. Caregivers must be alert and vigilant, responsive to any change in their loved ones' behavior. It is very difficult for caregivers to have full control of their own lives because they have to constantly adjust to the demands of their loved ones. In addition, the traditional parent-child psychological relationship can be sorely tested.

*Could it have been avoided?* It is strongly recommended that caregivers have some free time on a regular basis. The emphasis is on the "regular" basis as opposed to an "as required and if possible" basis to continue providing the high quality care they would like to provide. Caregivers must know that on a given day they will be free to do whatever they want and will not be tied down meeting the constant demands of their loved one with dementia. This should alleviate the burden and stress of caring for patients with dementia. For this purpose, help from other siblings, neighbors, friends, church goers, local social services, or voluntary organizations should be enlisted on a regular basis and a schedule developed with specific times clearly marked so that the main caregiver can have some "free time" on a regular basis.

11. Some general remarks.

Remaining calm and showing love and affection are two strategies that we frequently identify in these case scenarios. We write this with a clear understanding of the full humanity of the caregivers. We know, for example, that there will be moments when a caregiver's concerted efforts to remain calm and not show signs of irritation may not work. Our suggested strategies are designed to help caregivers see the potential for a catastrophic ending far in advance so that neither the caregiver nor the patient's face is escalating emotions, anger, and anxiety.

We urge caregivers to proactively seek out opportunities, whether regularly or occasionally, when they can pursue some satisfying interests of their own and take a break from caregiving. We also know that patterns of showing affection vary across relationships. For example, long-established family communication patterns, childhood trauma, or changes in how the patient with dementia responds to signs of affection may make it very difficult or even impossible for a caregiver to demonstrate affection by kissing, saying "I love you," or offering a strong embrace.

It remains true that helping patients with dementia feel wanted and valued is a critical part of managing potentially catastrophic episodes. But we understand the warmth of human contact can be communicated in a variety of ways (standing near, sitting close, a gentle touch on the hand, arm, or shoulder, a thoughtful smile, a welcoming hello, tender reassurances that all is well) and we urge caregivers to identify and utilize ways they can provide this warmth in a way that is comfortable for them.

# **Case Discussion**

- Characteristic features of the mild/moderate/severe stages of Alzheimer's disease (Budson & Solomon, 2016; Rosenberg, Pontone, & Onyike, 2016):
- a. Mild cognitive impairment: Decline is usually in a single cognitive domain:
  - Amnestic type: Very mild, but noticeable impaired memory, memory lapses.
  - Nonamnestic type: Mild word-finding difficulties, impaired executive functions, declining ability to plan and organize activities, tasks take longer to complete than previously. The patient experiences difficulties adjusting to changes, especially at work, but insight is usually preserved and patients are often able to develop compensatory strategies. Depression is often present.
  - About 50% of patients with the amnestic type of MCI develop Alzheimer's disease within 5 years, several, however, do not, and as many as 25% do not have evidence of brain pathology (Rosenberg et al., 2016). It, therefore, can be debated whether MCI is a true precursor of dementia. This issue has important psychosocio-economic implications.
- Mild Alzheimer's disease dementia: May appear normal to casual observer who previously had not known the patient. At this stage.
  - viously had not known the patient. At this stage, the patient experiences impaired memory, especially for recent events, impaired executive functions and judgment, and word finding difficulties. Impaired ability to recognize familiar places and occasional disorientation/confusion about location may occur, along with loss of spontaneity and initiative. At this stage, the patient takes longer to complete various tasks, including daily activities, and may forget about own personal

hygiene or experience difficulties taking own medication on personal initiative, handling own financial affairs and paying bills. This stage is characterized by changes in personality and mood, in addition to anxiety. The patient is unable to learn new things, adapt to changes, and cope with new or unexpected situations. Difficulties organizing thoughts and problem solving, poor judgment, and impaired decisionmaking process are characteristic of this stage, as are anxiety, restlessness, agitation, and a tendency to wander or make repetitive statements and movements. At this stage, the patient is a safety risk, especially in regard to driving and gun ownership. The Mini-Mental State Examination (MMSE) ranges from 18 to 26.

- c. Moderate Alzheimer's disease dementia: Cognitive impairment is evident, even to the casual observer who had not previously known the patient. Worsening memory impairment, especially for recent events; confusion; disorientation in time, space, and people; difficulties recognizing friends and relatives are present at this stage. The patient needs assistance with activities of daily living. Patients with moderate Alzheimer's disease dementia experience suspiciousness and paranoid delusions, and should not be left on their own because of safety reasons. MMSE ranges from 10 to 18.
- d. Severe/late stage Alzheimer's disease dementia: Inability to take care of personal hygiene, recognize relatives and friends, and communicate with other people characterize this stage. The patient experiences disturbed circadian rhythm, difficulties swallowing, weight loss, and impaired sphincter control of bladder and bowels. The patient may make reduced spontaneous movements when seated, adopting the fetal position in bed, and may make noises such as moaning, grunting, and groaning. Main causes of death: pneumonia (often aspiration pneumonia) and septicemia from infected pressure ulcers. MMSE less than 10.
- 2. Characteristic features of the seven stages of the FAST (Lyketsos, 2016; Reisberg, 1998):
- a. FAST Stage 1: Normal adult. No objective or subjective functional impairment.
- b. FAST Stage 2: Normal-aged adult. Subjective mild deficit regarding memory for recent events, word finding, locating various objects, and remembering nonimportant appointments. At this stage, the patient is coping with deficits, which do not affect performance of daily activities apart from inducing frustration and irritability.

- c. FAST Stage 3: Mild cognitive impairment. Objective deficits, including memory for recent events and remembering important appointments. These include memory lapses, word-finding difficulties, difficulties adapting to changes in the work environment, decreased work productivity, difficulties planning various activities, or even getting lost if driving or traveling to a new location.
- FAST Stage 4: Mild dementia.
  Difficulties performing various complex tasks of daily living such as paying bills, balancing a checkbook, and planning multistage activities.
- e. FAST Stage 5: Moderate dementia. Difficulties performing simple activities of daily living and taking care of hygienic needs. The patient is nevertheless able to cope, provided with some verbal guidance. This stage includes neglect of daily personal hygiene.
- f. FAST Stage 6: Moderately severe dementia. This stage progresses through a series of steps from 6a to 6e. The patient now requires physical assistance in addition to guidance for the following activities: getting dressed and undressed, bathing, and toileting. At Stage 6d, the patient is incontinent of urine in the absence of genitourinary pathologies, and at 6e is incontinent of feces in the absence of gastrointestinal pathologies.
- g. FAST Stage 7: Severe dementia. This stage progresses through a series of steps from 7a to 7f. At 7a, the patient's vocabulary is limited to very few words, perhaps even only one or two words such as yes/no at 7b. The patient is unable to ambulate independently or sit up without assistance. The patient is unable to smile (although facial movements such as a grimace may be present) at 7e, and is unable to hold his or her head up at 7f.

The FAST classification is more useful in moderate and severe/late stages of Alzheimer's disease as it can be used as a guide as to the level of assistance required.

 The Clinical Dementia Rating (CDR) Scale for Alzheimer's disease dementia (Budson & Solomon, 2016; Manning & Ducharme, 2010; Morris, 1993):

The Clinical Dementia Rating Scale is based on information collected from both the patient and collateral sources to assess the severity of the dementia. It has been standardized for multicenter use. Main limitations include the length of administration, reliance on collateral sources, and reliance on clinical judgment. Interrater variability is 83%. Six different cognitive domains are assessed: memory, orientation, judgment/problem solving, community affairs, home/hobbies, and personal care.

The severity of the each impairment is assessed on a 5-point scale for each domain: 0 = no*impairment*, 0.5 = questionable impairment, 1 = mild *impairment*, 2 = moderate *impairment*, and 3 = severe *impairment*.

a. Memory:

At Level 0, the patient experiences no memory loss or only slight inconsistent forgetfulness. At 0.5, the patient experiences slight forgetfulness with partial recollection of events (benign forgetfulness), and at 1, moderate memory loss (especially for recent events). This may interfere with daily activities. Level 2 is characterized by severe memory impairment for recent events, and new learned material cannot be retained. At 3, the patient suffers severe memory loss with only fragments remaining.

b. Orientation:

At 0, the patient is fully oriented, at 0.5 fully oriented but with minor difficulties with time relationships. At Level 1, the patient experiences moderate difficulties with time relationships. She or he is oriented for place at examination, but may have geographic disorientation elsewhere. At 2, the patient experiences severe difficulty with time relationships and is usually disoriented to time and often to place. At 3, the patient is oriented to people only.

c. Judgment/problem solving:

At 0, judgment is good. The patient still solves everyday problems, handles business and financial affairs well. Slight impairment in solving problems and understanding similarities and differences is seen at 0.5. At 1, the patient experiences moderate impairment in solving problems and understanding similarities and differences, though judgment is maintained. Level 2 is characterized by severe impairment in handling problems and understanding similarities and differences. Judgment is impaired. At 3, the patient is unable to solve problems or make judgments.

d. Community affairs:

At 0, the patient is independent, fully functional at usual levels at work in addition to activities such as shopping, volunteering, and integrating in social groups. Level 0.5 sees a slight impairment in these activities. At 1, the patient is unable to function independently, but may continue to be engaged in some activities. At this stage, the patient may appear normal to casual inspection. At 2, the patient is unable to function independently outside of the home, although may appear to be well enough to be taken to outside activities. At 3, the patient is too impaired to function outside the family home.

e. Home and hobbies:

At 0, the patient is able to maintain daily life at home, along with hobbies and intellectual interests; at 0.5, the patient becomes slightly impaired in these pursuits. Level 1 sees mild, although definite, impairment of function at home. For example, the patient may abandon difficult chores and complicated hobbies and intellectual interests. At 2, the patient is only able to complete simple chores and maintains very restricted intellectual interests. At 3, the patient is unable to have any significant function at home.

f. Personal care:

At 0 and 0.5, the patient is fully able to care for himself or herself, and at 1 can take care of self but requires prompting. At 2, the patient needs assistance with personal hygiene, getting dressed and keeping personal effects. At 3, the patient requires much help with personal care, and often may be incontinent.

 The MMSE (Budson & Solomon, 2016; Folstein, Folstein, & McHugh, 1975; Manning & Ducharme, 2010):

MMSE is widely used as a brief screening tool for dementia. The following domains are evaluated: orientation to time and place, attention/ concentration, recent memory, language, and praxis. It can be administered within 5 to 10 min. It is scored on a 30-point scale. A score below 24 identifies cognitive impairment, provided the patient is fully awake, lucid, does not have pathologies that may interfere with cognitive functions, is not depressed, and is not under the influence of medication that may interfere with cognitive functions. Test-retest reliability is high and interobserver reliability is good. Age, education, and culture, however, may affect on the results of the test. Untreated patients with Alzheimer's disease tend to deteriorate at an annual rate of 2 to 3 points.

5. The Montreal Cognitive Assessment (MoCA): MoCA evaluates orientation, memory, attention, language (naming), executive function, and visuospatial function. It is more sensitive than MMSE at detecting patients with mild cognitive impairment: 18% for MMSE compared with 90% for MoCA and mild Alzheimer's disease dementia: 78% for MMSE compared with 100% for MoCA (Nasreddine, Phillips, Bedirian, & et al., 2005). The main advantages of MoCA over MMSE include covering a larger variety of cognitive domains in addition to the test and clear instructions being freely available on the web:www.mocatest.org. The test has been translated into a number of languages. There are also versions available for blind patients. Its main drawback is that it is still relatively new and normative data are limited (Budson & Solomon, 2016).

 Other assessment scales: A number of other assessment scales are available and will be discussed in other case studies.

# Summary

- 1. Ask; do not tell: Patients with dementia should be asked not told.
- 2. Set a warm, affectionate tone to each encounter.
- 3. Avoid triggers: The dirty dress should not have been left on the laundry basket, a visual trigger.
- 4. Consider having two sets of "favorite" clothes.
- 5. Consider washing the "favorite" dress at night while patient is asleep.
- 6. Avoid arguments with patients who have Alzheimer's disease.
- 7. Try remaining calm at all times. This can be very difficult, but is essential.
- 8. Show the patient love and affection.
- 9. Sharing care with other caregivers (family, volunteers, or professional) should be organized from an early stage to avoid caregiver burnout.

# Acknowledgment

This case report has not been previously published.

#### **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

#### Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### References

- Budson, A. E., & Solomon, P. R. (2016). Memory loss, Alzheimer's disease and dementia (2nd ed.). Edinburgh, Scotland: Elsevier.
- Folstein, M. F., Folstein, S. E., & McHugh, P. R. (1975). A practical method for grading the cognitive state of patients for the clinician. *Journal of Psychiatric Research*, 12, 189-198.
- Lyketsos, C. G. (2016). In P. V. Rabins, C. G. Lyketsos, & C. Steele (Eds.), *Practical dementia care*. Definitions and overview of the book (pp. 1-19). New York, NY: Oxford University Press.
- Manning, C. A., & Ducharme, J. K. (2010). Dementia syndromes in the older adult. In *Handbook of assessment in clinical* gerontology (pp. 155-178). Philiadelphia, PA: Elsevier.
- Morris, J. C. (1993). The clinical dementia rating (CDR): Current version and scoring rules. *Neurology*, *43*, 2412-2414.
- Nasreddine, Z. S., Phillips, N. A., Bedirian, V., Charbonneau, S, Whitehead, V, Collin, I, . . . Chertkow, H. (2005). The Montréal cognitive assessment, MoCA: A brief screening tool for mild cognitive impairment. *Journal of the American Geriatrics Society*, 53, 695-699.
- Reisberg, B. (1998). Functional assessment staging (FAST). *Psychopharmacology Bulletin*, 24, 629-636.
- Rosenberg, P., Pontone, G., & Onyike, C. (2016). Neurodegenerative diseases causing dementia. In P. V. Rabins, C. G. Lyketsos, & C. Steele (Eds.), *Practical dementia care* (3rd ed., pp. 19-39). Oxford University Press.