Depression in the very old

Differences in presentation and approach to treatment: A case example

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Would you prescribe the same exercise program for a 90-year-old that you would for a 60-year-old? Can a 90-year-old "handle" 4 oz of Scotch as well as a 60-year-old? Generally not, because the physiologic and pharmocokinetic/pharmacodynamic changes that occur with aging during that three-decade gap are biologically significant.

Although older people are more heterogeneous as they age—one 85-year-old may be in a wheelchair in a nursing home whereas another might be playing tennis or golf—the average 90-year-old is substantially different from the average 60-year-old. Thus, it is curious that clinical trials for older people with major depression are generally conducted in people over age 60, which many people would not define as "geriatric" these days.[1] Nevertheless, it is difficult to recruit octogenarians and nonagenarians into clinical drug trials, whether it be in the community or in nursing homes.[2]

Case presentation

Mrs. J is a married 87-year-old woman. Her husband, age 91, is in generally good health and works part-time. Mrs. J has had few medical problems. She has received treatment for hypertension, hyperlipidemia, and osteoarthritis.

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Six months before her initial psychiatric evaluation, Mrs. J was on a family vacation and got lost in a large hotel compound. Following the experience she became extremely anxious, developed insomnia, and generally did not feel well. She sought the help of a psychiatrist, and during the initial assessment she described feeling confused and frightened that she was developing Alzheimer's disease (AD). She told her husband that she would rather die than suffer the way her friends with AD had suffered. Her daughter reported that Mrs. J had been anxious since the incident and that she had become much worse during the previous month.

Mrs. J, her husband, and her daughter all affirmed that she had become more forgetful, her general positive attitude toward life had turned pessimistic, and that she no longer enjoyed eating. Indeed, she had lost 12 pounds during the preceding 6 weeks and now weighed 105 pounds. She spent her days either in bed (although not sleeping) or pacing around the house asking what would become of her. She typically awoke at 3:00 AM and could not fall back to sleep. Mrs. J denied suicidal ideation, but she indicated that she very much wanted to die. She said she was not the person she used to be and was now worthless. She stopped doing volunteer work at a local hospital.

Her medical evaluation and physical examination were unremarkable. Laboratory results and head CT were normal.

Although Mrs. J's daughter was very sympathetic and concerned about her mother, Mr. J was angry with his wife for allowing herself to fall into and stay in a depressed state. Nevertheless, he said that most of the time he restrained himself from criticizing her.

Psychiatric evaluation determined that Mrs. J's Mini-Mental State Examination (MMSE) score was 23/30. She was extremely critical of herself for missing 7 points. A 7-Minute Screen (7MS) for Alzheimer's disease was inconclusive. Mrs. J's Geriatric Depression Scale (GDS) score was 9/15, suggesting a moderately severe depression.

Case management

Mrs. J was given sertraline, 25 mg/d, for depression. One week later her sleeping had improved, and she was less anxious. Nevertheless, her appetite remained poor, she had little to no energy, and she still felt that life was not worth living. Consequently, the sertraline dose was increased to 50 mg/d.

Three days after the dose was increased, Mrs. J called her psychiatrist with complaints of nausea, which had begun the first day after the increase. Also on day three, she experienced severe headaches and was fearful of continuing on the medication. She was advised to skip the medication for 1 day and to resume the next day at the 25 mg level.

Three weeks after beginning antidepressant therapy Mrs. J felt "90% better." Her daughter confirmed that

Table Prospective clinical drug trials of ≥4 weeks duration in subjects with average age ≥70

Study	Medications evaluated	Number of patients	Mean age	Duration (weeks)	Responders*
1990 Cohn, et al[10]					
	Sertraline	161	70	8	69.4
	Amitriptyline	80	71		62.5
1990 Katz, et al[11]					
	Nortriptyline	12	84	7	83.3
	Placebo	11	84		18.2
1993 Eli Lilly (data on file)					
	Fluoxetine	29	≥ 75	6	31
	Placebo	41	≥ 75		34.1
1993 Schone and Ludwig[9]					
	Paroxetine	54	74	6	37
	Fluoxetine	52	74		16
1999 Finkel, Richter, and Clary[3]					
	Sertraline	39	74	12	65
	Nortriptyline	37	75		26
1999 Finkel, Richter, Clary, and Batzar[4]					
	Sertraline	42	74	12	58.5
	Fluoxetine	33	75		42.4
2002 Roose[5]					
	Citalopram	84	80	8	41
	Placebo	90	79		38

*Responder: A research subject who showed improvement in depression with study medication, based on individual study criteria.

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Mrs. J was back to her old self, and the family considered this recovery a "miracle." Mrs. J had invited some of her friends over for lunch, gained 5 pounds since her treatment began, and was back to a normal sleep pattern.

She expressed gratitude for the return of a more positive attitude and informed the hospital that she would begin to volunteer again the following week.

At this point, Mr. J expressed a great deal of anger toward his wife for "putting me through this terrible ordeal." He said that he suffered as much if not more than his wife and that her condition interfered with his own functioning and feelings of well-being. Now that Mrs. J was no longer depressed, Mr. J felt that he could express his feelings, but Mrs. J was hurt by his criticism and anger.

Mr. J's anger, which had been simmering while his wife was incapacitated, came out full-force. At this point, the geriatric psychiatrist saw him for an individual session so that he could "vent." During the session, the psychiatrist educated Mr. J about the biological contributants to depression, and discussed with him the need to diminish—not increase—the stress levels on his wife. An additional session was scheduled for the two of them, and Mr. J calmed down significantly.

A 2-month follow-up visit demonstrates that Mrs. J has returned to her usual functional level, and the anger in the marital relationship has dissipated. At follow-up, Mrs. J's MMSE score is 29, and the 7MS is negative for Alzheimer's disease.

Discussion

This case illustrates many characteristics of major depression in older adults. Mrs. J's presentation—cognitive impairment with a range of depressive symptoms—is common in late life. Although the term "pseudodementia" is debated, clearly, depressed older patients are more likely than depressed younger patients to present with coexisting cognitive impairment. Moreover, memory complaints made by patients who are concerned about Alzheimer's disease are more characteristic of underlying depression than dementia. Mrs. J was informed that depression causes impaired concentra-

tion, and that once the depression was alleviated, her concentration would improve and so would her memory. The resolution of Mrs. J's depression coincided with a return to normal cognitive functioning.

Antidepressant dosing has been minimally studied in late life. Few studies involve patients over age 70 or 75 (table). Significant improvement in outcome and cognitive performance has been seen with sertraline compared with nortriptyline in a subgroup analysis of depressed patients age 70 and older.[3] In a similar analysis with depressed older patients age 70 and older, sertraline and fluoxetine demonstrated efficacy, with one cognitive parameter favoring sertraline.[4] Patients over age 75 with major depression exhibit no difference in therapeutic response between citalopram and placebo[5] or fluoxetine and placebo.[6]

Clinical drug trials in older adults generally utilize standard adult doses. Thus, Mrs. J would have dropped out of the sertraline studies because the dosing in those studies began at 50 mg/d, a dose that she could not tolerate. On the other hand, she had an excellent clinical response at 25 mg/d. Because of the heterogeneity of older people, some will require only 25 mg/d, whereas others may require up to 200 mg/d. Thus, clinical trials of antidepressants in older adults need to be targeted to different age ranges and different dosing levels.

A fascinating component of this case was the reaction of Mr. J to his wife's depressive episode. Spouses bear the brunt of depressed patients' psychological pain. Further, in late life, the depressed older person becomes less able to function and thereby provides less help to the healthier spouse while requiring a great deal more of the spouse's resources and support. The healthy spouse's resentment may build internally out of concern that expressing anger would worsen the depressed spouse's pain. Upon the depressed patient's recovery, however, the spouse's anger comes out and must be dealt with. The reaction of spouses to the depression is often unexplored by physicians, particularly in the primary care setting, but without intervention, such as psychotherapy or education, the spouse's resentment and anger can result in sequelae to the depression, which is mutually stressful and destructive.

Conclusion

Very old age does not protect a person from developing major depression, even for the first time. Nevertheless, advancements in antidepressant therapy have improved the prognosis for recovery. In addition to sertraline, other antidepressants that are commonly prescribed to older adults include mirtazapine,[7] citalopram,[8] fluoxetine,[9] and bupropion, although these medications either have not been studied or have not shown efficacy in the very old. Physicians who treat depression in older adults must be aware of presentations that do not occur in the young, including apathy, increased somatization, and cognitive impairment. Further, the existence of depression is associated with the occurrence of other major medical problems, including Parkinson's disease, cardiac illness, and diabetes mellitus. Thus, major depression may precede the symptomatic presentation of the underlying physical illness, or conversely, the presence of the major medical illness can contribute to depression. Finally, psychosocial issues, including involvement of family members, financial concerns, and the effect of depression on activities of daily living, are important to consider when managing an older patient with depression.

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