

In-service Training

The Two Most Common Dementias

Length: 1 hour

Goals: By the end of this training session, the participant will be able to:

- ☞ Describe the differences between Alzheimer's disease and vascular dementia.
- ☞ Describe the progression and stages of Alzheimer's disease.
- ☞ Describe the progression of vascular dementia.

The Two Most Common Dementias

The focus of this module will be on the irreversible dementias, because these are the more commonly encountered dementias in the assisted living facility. Of the irreversible dementias, Alzheimer's disease and vascular dementia are the most common.

Alzheimer's Disease

Over 4.5 million Americans have Alzheimer's disease, and this number is expected to rise as the "baby boomers" begin to reach age 65. 20% of these 4.5 million Americans are being care for in a facility, many of them in assisted living facilities.

Pathology

The pathology of Alzheimer's can be best described with three words: progressive, permanent, degeneration.

Progression

Alzheimer's disease doesn't hit a person over night. It is insidious, meaning it slowly develops over time. The changes and deficits occur slowly with subtle changes in cognition and functional abilities. The progression of Alzheimer's is classified into stages:

Stage 1: Normal

No functioning impairment noted. No complaints regarding memory loss or concentration.

Stage 2: Forgetfulness

No loss regarding awareness, but some complaints regarding memory loss, forgetting of names, familiar objects.

Stage 3: Early Confusion

Deficits in awareness of surroundings and date are evident to others. Psychiatric tests will show some problems with memory loss and concentration.

Stage 4: Late Confusion

Complex tasks, e.g., handling finances, become overwhelming, though person denies loss of memory or lack of concentration. Changes in language abilities begin to develop.

Stage 5: Early Dementia

Self care becomes a problem; simple tasks become problems, e.g., selecting appropriate clothes. Person may become angry, irritated, suspicious. No assistance required with eating or bathing, but has difficulty making choices. Can recall own name and names of spouse and children.

Stage 6: Middle Dementia

May forget spouse's name, other family members as well; forgets normal hygiene measures; prone to agitation, paranoia, delusions, even violence. Progressive loss of independence with ADLs, incontinence often develops.

Stage 7: Late Dementia

Motor and verbal dysfunction; incontinent of urine and bowel; may be bedbound and need total care.

Permanent

Alzheimer's disease is irreversible. It will not get better, and because of its progressive nature, it will get worse. There are interventions that can slow the progression of symptoms, but the disease itself (buildup of plaques and destruction of cells) will continue.

Degenerative

Alzheimer's disease is a neurological disorder that results in the destruction of vital cells within the brain. The destruction, which can be seen on autopsy occurs in the cortex, the outer portion of the brain which is responsible for higher cognitive function. Under electron microscope the degenerated cells are seen to have silk-like tangles and deposits of amyloid protein (plaques) within them. As these cells in the brain are destroyed, the symptoms of Alzheimer's begin to appear. The exact cause of these cellular changes is unknown. Theories have proposed environmental factors, genetics, and advanced age.

Vascular Dementia

Vascular, or multi-infarct, dementia is the second most common cause, after Alzheimer's disease. The pathology behind vascular dementia is that multiple blood clots occur throughout the brain leading to lesions in the tissue, or cell death. When this occurs in the cortex, or higher function area of the brain, it results in the symptoms of dementia.

Many of the symptoms of vascular dementia resemble those seen in Alzheimer's disease, however, the progression of is usually in a more step-wise fashion. Additionally, the resident with vascular dementia tends to have a more labile mood, with significant mood swings. Also, unlike Alzheimer's disease, the cause can be linked to preexisting cardiovascular disease. The care for residents with dementia will not usually vary regardless of the type or cause of dementia.

Management

However, because vascular dementia is related to pre-existing cardiovascular disease, medical management aimed at the vascular problems is often utilized. This consists of antihypertensive drugs to lower underlying blood pressure, reducing the stress placed on the blood vessels in the brain. Aspirin may be prescribed to prevent platelets from causing more clots. Coumadin may also be prescribed to prevent future clots. Finally life-style interventions, such as quitting smoking, improving diet, and increasing physical activity can build up of fatty plaque in blood vessels in the brain and reduce blood pressure.

However, these interventions will not reverse any damage that has already been done. Management of behaviors and assistance with ADLs does not differ in the types of dementia.

Quiz

THE TWO MOST COMMON DEMENTIAS

True and False

1. T F Pick's disease and Alzheimer's disease are the two most common dementias.
2. T F Alzheimer's disease and vascular dementia are reversible.
3. T F Alzheimer's disease is progressive, degenerative, and permanent.
4. T F The progression of vascular dementia is more step-wise than in Alzheimer's disease, with relatively obvious and sudden changes seen in the resident.

Multiple Choice

5. Which of the following best describes the progression of Alzheimer's disease?
 - a. Sudden, dramatic changes appearing over a short period of time.
 - b. A gradual decline occurring over several years.
 - c. Both are common.
6. Which of the following is not true about Alzheimer's disease?
 - a. A cure is available.
 - b. It will always get worse over time.
 - c. It is the result of destruction to important cells in the brain.
 - d. The exact cause has not been identified.
7. The cortex of the brain is responsible for
 - a. Basic functions, such as breathing and heart rate.
 - b. Control of sleeping and waking.
 - c. Higher cognitive functions, such as reasoning and language.
8. Vascular dementia is caused by
 - a. Unknown factors.
 - b. Blood clots in vessels supplying the brain.
 - c. Aluminum poisoning.
 - d. A virus.

Short Answer

9. Describe the differences between Alzheimer's disease and vascular dementia.
Include a description of the differences in progression.

Bibliography

The Two Most Common Dementias

Information in this section, in whole or in part, was obtained from the following resources.

Alzheimer's Association. 2000. *An Overview of Alzheimer's Disease*. Alzheimer's Association. Can be obtained at www.alz.org.

Alzheimer's Association. 2000. *Providing Quality Care*. Alzheimer's Association. Can be obtained at www.alz.org.

American Psychiatric Association. 1994. *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition*. American Psychiatric Association. Washington, D.C.

National Institutes of Health. 1995. *Alzheimer's Disease, Unraveling the Mystery*. Can be obtained at www.nih.gov.

Orientation/In-Service Sign-in Sheet

| | |
|-------------------------------------|-----------|
| Orientation/In-Service Topic/Title: | |
| Date: | Location: |
| Instructor/Title/Signature: | |
| Notes: | |

[illegible]

Certificate of Completion

THIS IS TO CERTIFY THAT

HAS COMPLETED THE FOLLOWING IN-SERVICE TRAINING

Administrator/Instructor

Date

