

Alzheimer's Disease:

- is the most common form of Dementia
- characterized by progressive impairment in memory, cognitive functions, language, judgment and ADLs.
- Ultimately, patients are unable to perform self-care activities and become dependent on caregivers.

Clinical Manifestations:

1. Disease onset is subtle and insidious.

- Short term memory impairment is often the first characteristic in earliest stages of the disease.
- Patients are forgetful and have difficulty learning and retaining new information. In addition to memory impairment, at least one of the following functional deficits is present:
 - a. language disturbance
 - b. visual- processing difficulty
 - c. inability to perform skilled motor activities
 - d. poor abstract reasoning and concentration

2. Patients may have difficulty in

- a. planning meals
- b. managing finances
- c. using a telephone
- d. driving without getting lost
- e. personality changes as irritability and suspicious
- f. personal neglect of appearance
- g. disorientation to time and space

3. At the middle stage of AD, patients experience:

- a. repetitive actions
- b. nocturnal restlessness
- c. apraxia (impaired ability to perform purposeful activity)
- d. aphasia (inability to speak)
- e. agraphia (inability to write)

4. With disease progression signs of frontal lobe dysfunction appear;

- a. loss of social inhibitions
- b. loss of spontaneity

In the middle and late stage of the disease the following occur:

- a. hallucinations
- b. delusions
- c. aggressions
- d. wandering behavior

5. Patients in the advanced stage require total care. Symptoms may include:
- urinary and fecal incontinence
 - emaciation
 - increased irritability
 - unresponsiveness or coma

DIAGNOSING THE DISEASE

1. Patients history
2. CT, MRI, SPECT
3. Neuropsychological evaluation
4. Laboratory Tests
5. Commercial assays for cerebrospinal fluid

MANAGEMENT:

1. The primary goal of treatments for Alzheimer's disease are;
 - to maximize functional abilities and
 - improve quality of life by enhancing mood, cognition, and behavior
2. Cholinesterase inhibitors the treatment for cognitive impairment
 - tacrine (Cognex)
 - donepezil (Aricept)
3. Clinical trials of other agents
 - estrogen
 - non-steroidal anti-inflammatory drugs
 - botanical agents
4. Anti- depressants for patients with depressive symptoms.
5. Pharmacologic treatments with anti psychotic for patients with behavioral disturbances; these are: clozapine - (Clozaril)
Risperidon- (Risperdal)
Olanzapine- (Zyprexa)
6. Non pharmacologic treatments that may include:
 - Psychotherapeutic techniques -reality orientation and memory retraining
 - Reminiscence therapy and stimulation-oriented treatment such as art and other recreational therapies

COMPLICATIONS:

1. Increased susceptibility to infections.
2. Injuries due to lack of insights, hallucinations and confusions.
3. Malnutrition due to inattention to meal time and hunger or lack of ability to prepare meals.

WHAT TO ASSESS:

1. Cognitive for orientation, insight, abstract thinking, concentration, memory and verbal ability.
2. Changes in behavior and ability to perform ADLs.
3. Nutrition and hydrations includes checking weights, skin turgor and meal habits.
4. Motor ability, strength, muscle tone and flexibility.

NURSING INTERVENTIONS:**A. Improving Cognitive Responses**

1. Simplify environment
2. Maintain strict routine
3. Encourage participation in care
4. Provide rest in between activities
5. Post large calendar and clock
6. Use of lists and written instructions
7. Maintain consistency in interactions

B. Preventing Injuries

1. Avoid restraints
2. Provide adequate lighting
3. Remove unneeded furniture and equipments
4. Provide identification tag or alert bracelet
5. Use of non slip shoes or slippers
6. Use of assistive safety devices
7. Ensure physical activities as tolerated

C. Ensuring Adequate Rest

1. Administer antipsychotic to manage agitation
2. Provide periods of physical exercises to expend energy
3. Support normal sleep habits and bedtime rituals
4. Maintain quiet, relaxing environment to avoid confusion and agitation

D. Ensure Adequate Food/Fluid Intake

1. Prepare simple nutritious meals
2. Serve meals in variety of ways
3. Prepare well balanced and colorful menus
4. Sit with the patient at meal time

E. Muscle Strength

1. Encourage patient for simple exercise
2. Assist patient to things difficult for them to do
3. Reward patient for positive outcome

DEMENTIA

- is a chronic disturbances involving multiple cognitive deficits that includes memory impairment.

Levels of Dementia:

- Primary level
- Secondary level

Primary Dementia - are degenerative disorders. These are progressive, irreversible and not due to any other conditions

Specific disorders are

1. dementia of Alzheimer's type (DAT)
2. vascular dementia (Multi infarct dementia (MID))

Dementia of Alzheimer's Type (DAT) stages:

- a. Initial stage - demonstrates progression of symptoms
- b. Mild stage - cognitive deficit in the area of short term memory and accomplishment of goal-directed activity
- c. Final stage - profound impairment occurs in the areas of cognition and self-care abilities,

DAT - is believed to have multiple causative factors.

1. Genetic factors
2. Biochemical and Brain structure factors

Secondary Dementia

- occurs as a result of another pathologic process

1. Infection- related dementia

- a. Acquired Immunodeficiency Syndrome (AIDS)
- b. Chronic Meningitis
- c. Jacob - Creutzfeldt disease
- d. Post encephalitic dementia syndrome
- e. Progressive multi focal leucoencephalopathy
- f. Syphilis
- g. Subacute sclerosing panencephalitis
- h. Tuberculosis

2. Sub cortical degenerative disorders

- a. Huntington's disease
- b. Parkinson's disease
- c. Wilson's disease
- d. Thalamic disease

3. Hydrocephalic dementia
4. Vascular dementia (MID)
5. Traumatic conditions
6. Neoplastic dementia
 - a. Glioma
 - b. Meningioma
 - c. Meningeal carcinomatosis
 - d. Metastatic deposits
7. Inflammatory conditions such as:
 - Sarcoidosis
 - Systemic lupus erythematosus
 - Temporal arteritis
8. Toxic conditions
9. Metabolic Disorders

EVALUATIONS:

- Diagnostic tests - CBC, MRI, CT, PET, SPECT
- Neuropsychiatric evaluations
- Complete comprehensive physical examinations

MANAGEMENT OF DEMENTIA

1. Treatment is generally community-focused. Its goal is to maintain the quality of LIFE as long as possible despite the progressive nature of the disease.
 - Effective treatment is based on:
 - Diagnosis
 - Assessment
 - Measurements of the degree, nature and disease progression
 - Assessment of functional capacity and ability for self care
 - Family and social system assessments
2. Environmental strategies
3. Pharmacologic therapy

COMPLICATIONS

1. May become permanent
2. Serious injuries
3. Self inflicted injuries
4. Aggressions or violence
5. Wandering events
6. Serious depression

NURSING INTERVENTIONS

1. Improving Communications
2. Promoting Independence and self care
3. Ensuring safety
4. Improving Socialization
5. Preventing Violence and Aggressions

DEPRESSION or DEPRESSIVE DISORDERS

- are considered MOOD disorders.
- Mood is a sustained emotion.
- Mood disorders are characterized by disturbances in feelings, thinking and behavior.
- It may occur in a continuum ranging from severe depression to severe manics.
- A depressive illness is painful and can be psychophysiologically debilitating.

Depression is much more than just a sadness.

- it affects the way one feels about the future
- can alter basic attitudes about the self
- it can make the person so depressing and expresses hopelessness

The causes for depressive disorders have not been established. These are thought to result from complex inter - actions among a variety of factors such as:

- A. Genetic factor
- B. Biochemical Factors
- C. Medication Factors
- D Psychosocial Factors

Forms of Depression

1. Major Depressive Disorders - acute but time- limited
2. Dysthymic Disorders - struggle with more chronic but less severe depression

Types of Depression

1. Melancholic Features - is the loss of interest in most activities or find difficult to react to events in their lives that would customarily being pleased
 - morning is a particular difficult time of the day for people to this type
 - they wake up much earlier than usual
 - feeling more gloomy throughout the morning
 - struggling other more symptoms throughout the day
2. Seasonal Pattern - people develop depressive episode at about the same time of the year usually for about two months during the fall and or winter, but then they return to normal functioning. They lack energy, tend to sleep excessively, over-eat, crave for carbohydrates.

MANAGEMENT

1. Patient may receive treatment
2. Inpatient treatment is directed toward medication management and psychotherapy.
3. Somatic therapies
4. Complimentary/ alternative treatments
5. Psychotherapy

COMPLICATIONS

1. Physical deterioration
2. can lead to suicide
3. Use of alcohol or drugs

INTERVENTIONS

1. Strengthening Coping and Sense of Hope
2. Maintaining Safety
3. Participation in ADLs
4. Facilitating Sleeps