

Trends in Dementia Care

Educational Objectives

1. Know the relationship between dementia and Alzheimer's disease (and related disorders)
2. Describe recent research on risks for and treatment of neurodegenerative dementia
3. State three factors important to the quality of care of dementia patients.

Outline

Definitions

Dementia – decline from prior level, persists, interferes with ADLs, 2+ cog impairments

Neurodegenerative (gradual disseminated cell death) vs progressive (discrete, sudden cell death)

Mild cognitive impairment (MCI – Peterson criteria) – normal ADLs & general cognitive function, but c/o bad memory

Differential Diagnosis – reversible vs irreversible

Reversible/treatable – e.g. thyroid, anemia,

Arrestable – e.g. alcohol, infections

Irreversible – Alzheimer's, Lewy body, Picks/Frontotemporal, Vascular, (CJD rare – prion disease)

Risks

Age – biggest risk factor

Lifestyle – diet, risky activities, alcohol

Genes – heritability modifiable by lifestyle

Genetics

Chromosomes 1 & 14 – familial AD, presenilins

Chromosome 19 – Apolipoprotein E, alleles 2,3,4 – perhaps accounts for majority of AD cases

Chromosome 21 – Downs syndrome connection, beta amyloid

Chromosome 17 – frontotemporal - tauopathies

More . . . 9, 12, 15

Protection

Education – lifelong learning is a must; Use it or lose it!

Lifestyle – diet, exercise, moderation, (anti-inflammatory drugs) – start early in life

New Medications

Reminyl, Exelon, Aricept – cholinesterase inhibitors

Others in development – gaba agonists (neurotransmitters), secretase inhibitors (beta & gamma secretase cut protein too short, cause protein build up in cell, leads to cell death, alpha secretase may be a useful treatment).

Vaccine

Developed from transgenic mouse model, mediates immune response to clear beta amyloid plaques in mice

Appears safe in animals, brain inflammation in human trials – needs more study

Stops disease progression in mice that have it, seems to reverse damage

Estrogen

Was thought to give protection early on, little evidence for effect once AD is in progress; some major risks.

Recent research shows **NO** effect as a treatment

Anti-oxidants

Vitamins E & C – free radical scavengers, may protect against damage throughout lifetime and postpone onset, seem to improve ADL function in late AD, but do not affect cognition

Managing the Patient to Maximize Quality of Life

Structure the day – provides security, promotes confidence

Review communication style – no arguments, simplify language/commands, anticipate

Provide meaningful activities for self-esteem, maintain competency, promote health (sleep)

Caring for the Caregiver

Support, respite, education, understand & promote resolution of grief

Promote realistic expectations – pace for the long haul.