



DOWN SYNDROME GUILD
OF DALLAS

Alzheimer's Disease and Down Syndrome

Alzheimer's disease, a degenerative neurological disorder characterized by progressive memory loss, personality changes and loss of functional motor capabilities, is far more common in individuals with Down syndrome than the general population. However, not all individuals with Down syndrome will develop Alzheimer's disease, and even those showing Alzheimer's-type symptoms may not have Alzheimer's disease since other conditions can mimic the symptoms.

How common is Alzheimer's disease in individuals with Down syndrome?

Estimates vary, but a reasonable conclusion is that 25 percent or more of individuals with Down syndrome over age 35 show clinical signs and symptoms of Alzheimer's-type dementia. The percentage increases with age. In the general population, Alzheimer's disease does not usually develop before age 50, and the highest incidence (in people over age 65) is between five and 10 percent. The incidence of Alzheimer's disease in the Down syndrome population is estimated to be three to five times greater than in the general population, and oftentimes, symptoms begin much earlier.

What are the symptoms of Alzheimer's disease?

Early symptoms include loss of memory and logical thinking, personality change, decline in daily living skills, new onset of seizures, changes in coordination and gait, and loss of continence in bladder and bowel habits.

How is a final diagnosis made?

Alzheimer's disease is difficult to diagnose. It is important to be certain Alzheimer's-type symptoms do not arise from other conditions, namely thyroid disorders, clinical depression, brain tumor, recurrent brain strokes, metabolic imbalances and various neurological conditions.

The diagnosis of Alzheimer's disease is made on the basis of clinical history, showing a slow, steady decrease in cognitive function and a variety of laboratory tests which provide contributory evidence, including electroencephalogram, brain stem auditory evoked response, computerized transaxial tomography and magnetic resonance imaging, among other tests and measurements.

Is there a baseline test that can be repeated at intervals to determine specific decrease in cognitive function?

Psychologists often use questionnaires answered by family members, companions or caretakers that assist in the early detection of dementia. It is recommended that individuals with Down syndrome be tested at age 30 to provide a baseline reading, and periodically thereafter. If the

tests show deterioration, further tests must be made to rule out conditions that present similar or overlapping symptoms.

What information has research yielded about a link between Alzheimer's disease and Down syndrome?

Current research investigating how certain genes on Chromosome 21 may predispose individuals with Down syndrome to Alzheimer's disease. A number of centers are testing therapies in Down syndrome that appear to benefit patients with Alzheimer's disease in the general population.

Alzheimer's Disease and Down Syndrome Resource List

Alzheimer's Association (National Office)

225 North Michigan Avenue, Fl. 17
Chicago, IL 60601-7633
Telephone: (800) 272-3900 (24 hour hotline)
Website: <http://www.alz.org>

Alzheimer's Disease International's fact sheet on dementia and intellectual disabilities.

<http://www.alz.co.uk/adi/publications.html>

Alzheimer's disease and people with mental retardation.

<http://www.thearc.org/NetCommunity/Document.Doc>

Developmental disabilities and Alzheimer's disease: what you should know.

<http://www.thearc.org/publications>

Books on Alzheimer's Disease and Dementia

Holland, A. "Down Syndrome and Dementia". In Dementia. London, UK: Oxford University Press (2000). <http://www.oup.co.uk>

Janicki, M. Dalton, A.J.P. Dementia, Aging, and Intellectual Disabilities: A Handbook. Brunner/Mazel Publisher (1999). Now Routledge Mental Health.

McGuire, D & Chicoine, B. Mental Wellness in Adults with Down Syndrome. Bethesda, MD: Woodbine House (2005). <http://www.woodbinehouse.com>

Prasher, V. P. Alzheimer's Disease and Dementia in Down Syndrome and Intellectual Disabilities. Radcliffe Publishing (2005). <http://www.radcliffe-oxford.com>

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