

PHYSICIAN FACT SHEET ON THE ROLE OF GENETICS AND DEMENTIA

1. A positive family history for Alzheimer's disease increases the individual's risk for developing dementia.
2. A family history of Alzheimer's disease does not confirm the presence of this disease unless a post-mortem examination is performed.
3. Individuals who have siblings with Alzheimer's disease have up to a 3.5-fold increased risk for developing dementia.
4. The autosomal dominant variant of Alzheimer's disease produces about 2% of all dementias.
5. Multiple "suspect" genes are linked with late onset dementia; most associated with the APOE 4 gene on chromosome 19.
6. APOE typing is not predictive for dementia as some ethnic groups have high rates of APOE 4 and normal rates of dementia.
7. In elderly twins, genetic factors accounts for 48% of variation in risk for dementia.
8. Vascular dementia and diffuse Lewy body disease probably have limited genetic risk factors.
9. Frontotemporal dementia is associated with chromosome 17 that programs tau.
10. A simple genetic test is unlikely for Alzheimer's disease; however, a genetic screen that assesses risk factors is likely within the next five years.
11. Genetic risk can be crudely assessed by determining the number of family members with proven Alzheimer's disease, age of onset, and proximity in the family tree.
12. Genetic risk factors, basic healthcare compliance, and lifestyle decisions may alter the risk for dementia.