

Huntington's Disease (HD)

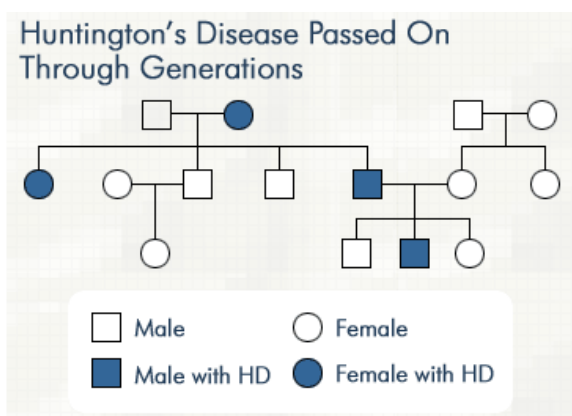
March 11, 2009

Huntington's Disease is a genetic disease that affects the neurons of the brain. It is a genetically programmed degeneration of the cells of the brain. Due to its genetic dominance and its place within the human genome, each child has a 50/50 chance of inheriting the mutated gene. The gene is found on chromosome 4, which is an autosomal chromosome (not sex-linked), making the disease equally distributed between sexes. If a child inherits the gene that causes Huntington's disease, then they will develop the disease and their offspring will then have a 50/50 chance of inheriting and developing the disease. On the other hand, children that do not receive the mutated gene will not develop the disease and not act as a carrier to pass the gene onto their offspring.

According to MedicineNet.com, "More than 15,000 Americans have HD. At least 150,000 others have a 50 percent risk of developing the disease and thousands more of their relatives live with the possibility that they, too, might develop HD."

The onset of this disease is variable. "Early-onset" and "Juvenile" HD are terms associated with a person that exhibits symptoms of the disease before the age of 20. Adult-onset HD often occurs when people reach middle age and tends not to appear after the age of 55. The earlier the symptoms appear, the faster the disease seems to progress.

Also called Huntington's chorea, it can be characterized by the dance-like movements that are involuntarily produced because of the degeneration of brain cells. Other known effects include loss of intellectual abilities as well as emotional disturbance. Throughout the onset of the disease, people with Huntington's disease may develop difficulty learning new things, remembering facts, even making a decision. Later on, as the disease progresses, these tasks become increasingly difficult and may lead to difficulty doing voluntary behaviors such as feeding and swallowing. Emotionally, people with Huntington's disease may experience mood swings, depression, and irritability.



Genetic testing can be done for people who have had family history of Huntington's disease. The test includes a sample of blood that is tested for the presence of the mutation. Testing may also involve a DNA sample of a close relative with the disease.

Currently, there is no treatment for reversing or controlling the degeneration of the disease. Medications are used to control some of the effects of the disease, such as the choreic movements, depression, and obsessive-compulsive traits. Side effects of these drugs include fatigue, restlessness and hyperexcitability.

Expert on Huntington's Disease? DSES is always looking for volunteers to teach or give presentations!

Resources and Additional Information:

National Institute of Neurological Disorders and Stroke;

<http://www.ninds.nih.gov/disorders/huntington/huntington.htm>

Mayo Clinic.com;

<http://www.mayoclinic.com/health/huntingtons-disease/DS00401/DSECTION=when-to-seek-medical-advice>

MedicineNet.com;

http://www.medicinenet.com/huntington_disease/article.htm