

The caudate is part of the basal ganglia involved in higher-order motor control, learning, memory, and emotions. It is characteristically affected in Huntington's disease.

Decrease of ACh

[Down-arrow A-seagull-cola](#)

In Huntington's Disease, the caudate loses the neurotransmitter, acetylcholine.

Decrease of GABA

[Down-arrow GABA-goose](#)

In Huntington's Disease, the caudate loses the neurotransmitter GABA, an inhibitory neurotransmitter.

Signs and Symptoms

Chorea

[Korean-flag](#)

Chorea is described as jerky, random uncontrollable movements, and these are often characteristic of Huntington's disease.

Dementia

[Demented-D-man](#)

Patients often display cognitive dysfunction, including dementia.

Depression

[Depressed-emo](#)

Patients often display neuropsychiatric dysfunction, including depression.

Glutamate Toxicity

[Glue-tomatoes](#)

Glutamate is an excitatory neurotransmitter that is believed to be involved in the death of nerve cells of people with Huntington's Disease, due to over-excitation, which eventually leads to cell death.

Neuronal Death via NMDA Binding

[NMDA-roots](#)

Glutamate binds to NMDA receptors, resulting in over-excitation and eventually cell death.