

Dental Conference 6

Basal Ganglia, Hypothalamus and Limbic System

1. Is the major output of the basal ganglia excitatory or inhibitory? To where does it go?
2. For Parkinson's and Huntington's diseases, identify the specific important cellular lesions and explain in the context of basal ganglia circuitry how the lesions give rise to symptoms.
3. The paraventricular nucleus of the hypothalamus contains parvocellular neurons which release oxytocin or vasopressin. Are these substances released as neurohumoral agents or as neurotransmitters?
4. Body temperature control employs a feedback mechanism. How is the hypothalamus involved?
5. What are the differences between short- and long-term control of feeding?
6. The amygdala and the ventral tegmental area (VTA) are two small subcortical areas that are involved in learning. Explain.