Acute hypoxia typically causes eosinophilic changes and necrosis in selective populations of neurons, including Purkinje cells in the cerebellum (shown here), pyramidal neurons in the cerebral cortex, and pyramidal neurons in the hippocampus.

This coronal section close-up shows the mammillary bodies (bottom of picture below the third ventricle) with petechial hemorrhages in a case of Wernicke-Korsakoff syndrome.

This coronal section from a newborn with kernicterus shows the yellow staining of subcortical gray matter structures.