



Focus[®]

Digital Anatomy Atlas

Neuroanatomy

An exclusive chapter covers meningeal coverings and dural venous sinuses. The cerebrum and cerebellum have been dealt with in terms of external surface and interior anatomy. The thalamus and hypothalamus and the brain stem along with ventricular anatomy have been emphasized. The section concludes with a chapter on blood supply.

The topics include:

1. Meninges and Dural Venous Sinuses (00:13:07)

- Introduction
- Dural Venous Sinuses
- Meninges of the brain
 - AV fistulas
 - Cavernous Sinus Thrombosis
 - Epidural Hemorrhage
 - Meningeal headache
 - Meningitis
 - Subarachnoid Hemorrhage
 - Subdural Hemorrhage

2. Cerebrum - Surfaces, Sulci and Gyri, Functional Areas (00:20:16)

- Introduction
- Cerebrum - Sulci and Gyri
- Functional areas of cerebrum
 - Frontal Eye Field Lesions
 - Lesion in Prefrontal Cortex
 - Lesions in Auditory Area
 - Lesions in Brocas Speech Area
 - Lesions in Wernickes Area
 - Lesions of the Cerebrum
 - Primary Motor Cortex
 - Sensory Cortex Lesions
 - The Primary Visual Area Lesions



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3. Interior of Cerebrum - Nuclei, Horizontal and Coronal Sections (00:13:39)

- Introduction
- Coronal section of the brain at the level of diencephalon and midbrain
- Horizontal section of the cerebrum at the level of interventricular foramen
 - Athetosis
 - Chorea
 - Damage to the internal capsule
 - Huntingtons disease
 - Parkinson's disease
 - Sydenham's chorea

4. Thalamus and Hypothalamus (00:13:00)

- Introduction
- Hypothalamus
- Thalamus
 - Diabetes insipidus
 - Other hypothalamic disorders
 - Thalamic syndrome

5. Brainstem - External Features (00:17:07)

- Introduction
- Brainstem external features - Posterior surface
- External aspect of the brainstem - Ventral view
 - Brainstem compression
 - Brainstem herniation
 - Extraocular muscle movements
 - Lesions of the medulla oblongata
 - Lesions of the midbrain
 - Lesions of the pons

6. Brainstem - Internal Features (00:23:28)

- Introduction
- Lower medulla
- Lower midbrain
- Lower pons
- Mid medulla
- Upper medulla
- Upper midbrain
- Upper pons
 - Basilar artery thrombosis
 - Blood supply of the brainstem
 - Lateral medullary syndrome
 - Pontine hemorrhage
 - Webers syndrome



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7. Cerebellum - External Surface - Superior and Inferior, Interior and Peduncles (00:07:57)

- Introduction
- Cerebellum
 - Cerebellar cognitive affective syndrome
 - Chiari type 1 malformation
 - Classification of cerebellar lesions
 - Effect of alcohol on the anterior lobe of the cerebellum
 - Fractionated somatotopy

8. Ventricles of the Brain and CSF Flow Dynamics (00:14:56)

- Introduction
- Fourth ventricle
- Lateral ventricle
- Third ventricle
 - Anencephaly
 - Cisternal puncture
 - CSF leakage
 - Hydrocephalus
 - Puncture of the lateral ventricle

9. Blood Supply of the Brain (00:12:31)

- Introduction
- Arterial supply of the brain
- Venous drainage of the brain
 - Cerebral angiography
 - Intracerebral hemorrhage
 - Subarachnoid hemorrhage
 - Subdural hemorrhage
 - Thrombosis of the intracranial veins