

Brain Organisation

The "fore"

Brain (B) and Spinal cord (SC) dev from ectodermal neural tube

(Anterior pt of neural tube + associated neural crest tis) expands

Constriction of above * appear

Create

Subdivided into **second B vesicle**:

1. Prosencephalon [**forebrain**] into (a. Telencephalon & b. Diencephalon)
2. Rhombencephalon [**hindbrain**] into (a. Metencephalon & b. myelencephalon)

give rise

MesB [Midbrain]

- give rise to itself
- cerebral aqueduct (aqueduct of midb)

myelB (myle = marrow)

- medulla oblongata
- lower part of ventricle

DIB

- thalamus,
- hypothalamus,
- epithalamus
- third ventricle

Telencephalon (tel - distance; -encephalon = B)

- cerebrum
- lateral ventricles

3 regions called **primary B vesicles**:

1. Prosencephalon (Pro = Front)
2. Mesencephalon (Mes = Mid)
3. Rhombencephalon (Rum = Ass)

hollow part

Wall of diff B

neural crest tis

associated connective tis

meningeal membr

Bones of skull

nerve tis

ventricle (fluid-filled space)

4 Major Region

Cerebrum

- supported on Diencephalon + brain stem

Diencephalon

- superior to brainstem

Cerebellum

- posterior to brainstem

Brainstem

- Continuous with SC
- Consist of
 - midB
 - Pons
 - Medulla Oblongata

Posterior

Anterior

TABLE 14.1 Development of the brain

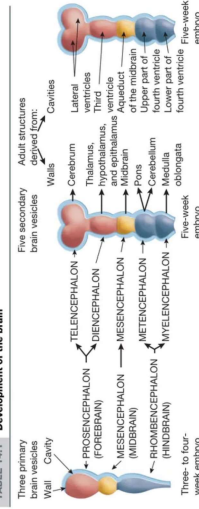
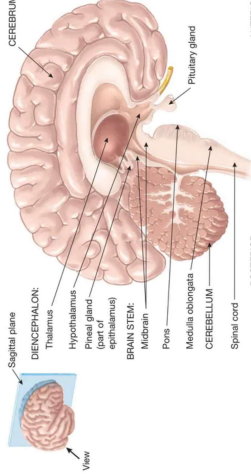


FIGURE 14.3 The brain. The pituitary gland is discussed with the endocrine system in chapter 15.

The four principal parts of the brain are the brain stem, cerebellum, diencephalon, and cerebrum.



(a) Sagittal section, medial view