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Assignment for viva.

Question: Write a note on cerebrospinal fluid, its circulation and absorption.

**Cerebrospinal fluid:**

Cerebrospinal fluid (CSF) is a clear, colorless body fluid found in the brain and spinal cord. It is produced by specialised ependymal cells in the choroid plexuses of the ventricles of the brain, and absorbed in the arachnoid granulations.

**Fuction:**

Cerebrospinal fluid has three main functions: CSF protects brain and spinal cord from trauma. CSF supplies nutrients to nervous system tissue. CSF removes waste products from cerebral metabolism. The CSF also carries toxins and drugs away from the brain, and it helps transport hormones from one part of the brain to the other. But even with all these roles, it doesn't actually have a lot of substance.Boone is drinking the CSF because a disease is using up her own.

**Circulation and absorption of cerebrospinal fluid:**

Cerebrospinal fluid (CSF) Circulatory Pathway, show the major pathway of CSF flow. Beginning in the lateral ventricles, CSF flows through two passageways into the third ventricle. From the third ventricle it flows down a long, narrow passageway (the aqueduct of Sylvius) into the fourth ventricle. From the fourth ventricle it passes through three small openings (foramina) into the subarachnoid space surrounding the brain and spinal cord. CSF is absorbed through blood vessels over the surface of the brain back into the bloodstream. Some absorption also occurs through the lymphatic system. Once in the bloodstream, it is carried away and filtered by our kidneys and liver in the same way as are our other body fluids. The ventricular system is the major pathway for the flow of CSF. CSF also flows directly from the ventricles into the brain tissue sur­rounding them. This is shown by the broken arrows. Here the CSF passes through the spaces between the cells to where it eventually enters the subarachnoid space. It is believed that the brain tissue does not absorb any CSF, but simply provides another pathway for the fluid moving to the subarachnoid space. Some small amounts of CSF are also absorbed into lymphatic channels along the membranes covering the nerves (nerve sheaths) as they leave the brain stem and spinal cord .