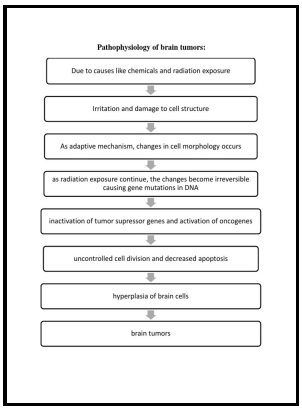
Physiology of the intracranial circulation

s.n. - Neuroanatomy and physiology — Northwestern Scholars



Description: -
-
Cerebral circulation.Physiology of the intracranial circulation
-Physiology of the intracranial circulation
Notes: Caption title.
This edition was published in 1918

Filesize: 48.47 MB

Tags: #Cerebral #blood #flow #autoregulation

Cerebral blood flow autoregulation

Subarachnoid Cavity: Diagrammatic representation of a section across the top of the skull, showing the membranes of the brain with the subarachnoid cavity visible on the left. Blood viscosity is not a completly immutable property, and it can occasionally become relevant - for example, in scenarios where it is dangerous elevated.

18.7D: Blood Flow in the Brain

Such anastomoses occur normally in the body in the circulatory system, serving as backup routes for blood to flow if one link is blocked or otherwise compromised, but may also occur pathologically. This raises the arterial blood pressure to force the blood vessels to dilate and maintain adequate cerebral blood flow. This causes hypocapnia as CO2 is being blown out faster than its production rate.

Regulation of the cerebral circulation: bedside assessment and clinical implications

Therefore, the brain tissue is not being perfused sufficiently to maintain consciousness. The following description is based on idealized human cerebral circulation.

Cerebral blood flow and vascular physiology

This has implications for transfusion thresholds for traumatic brain injury patients, as one might naturally conclude from this that the oxygen flux to the brain has some sort of built-in buffer and that a relatively large drop in DO 2 could be tolerated.

Physiology and autoregulation of cerebral circulation

This keeps cerebral blood flow relatively constant when there are changes in blood pressure. And through this clumsy segue, the reader can already see the dim outlines of the Hagen-Poiseuille equation.

14 Cerebral circulation ideas

Cushing reflex is a physiological nervous system response to increased intracranial pressure ICP that results in Cushing's triad of increased blood pressure, irregular breathing, and bradycardia. Multiple mechanisms are probably responsible for this phenomenon, and they probably exert their action simultaneously.

Cerebral circulation

Cerebral blood flow is reduced in patients with sepsis syndrome.

Related Books

- Rise of Russia
- Art, science, and history in the Renaissance
- Cuore ecclesiale - Vittorio Bachelet a 25 anni dalla morte.
- Neuron - cell and molecular biology
- Flower in the dusk