Open Peer Review on Qeios

Ergotamine

National Cancer Institute

Source

National Cancer Institute. <u>Ergotamine</u>. NCI Thesaurus. Code C61751.

A naturally occurring ergot alkaloid with vasoconstrictor and analgesic property. Ergotamine selectively binds and activates serotonin (5-HT) 1D receptors located on intracranial blood vessels, including those on arterio-venous anastomoses, thereby resulting in vasoconstriction and reducing the blood flow in cerebral arteries that may lead to relieve of vascular headaches. This agent also selectively binds to alphaadrenergic receptors, thereby stimulating vascular smooth muscle and causing vasoconstriction in both arteries and veins, which also contributes to the relief of headaches. Furthermore, the activation of 5-HT1D receptors on sensory nerve endings of the trigeminal system results in the inhibition of pro-inflammatory neuropeptide release.