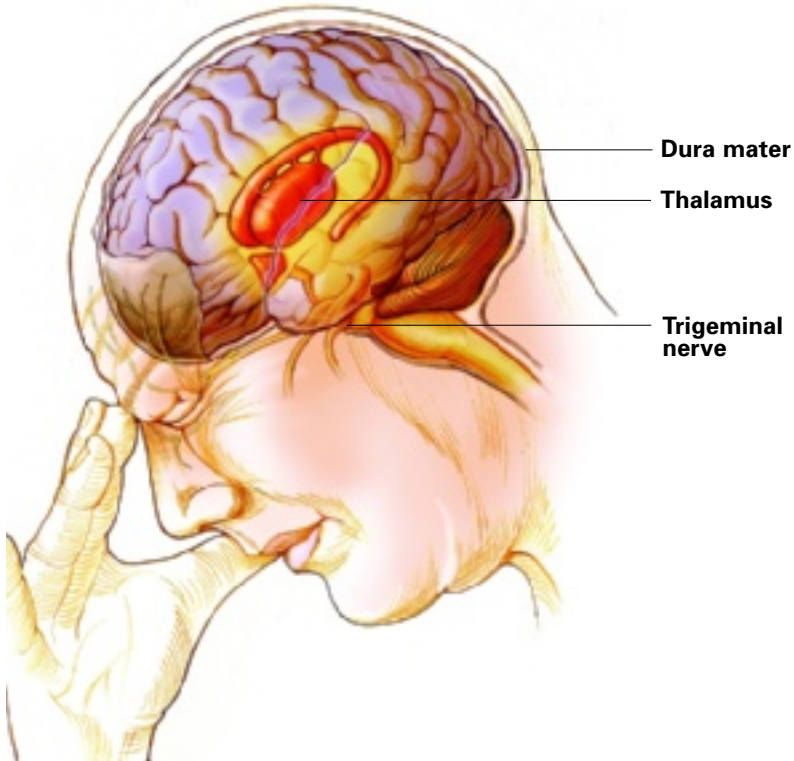


Source of cluster headaches



The hypothalamus is believed to be the source of cluster headaches. Its posterior cells regulate autonomic function and the anterior nuclei serve as the major circadian pacemaker. The elevation of plasma trace amine levels, including tyramine, octopamine, and synephrine in both migraine and cluster headache supports the hypothesis that disorders of biogenic amine metabolism may be a characteristic biochemical trait in primary headache sufferers.² The trigeminal innervation of the dura and its vessels has a prominent role in the mechanism of cluster headache. Positron emission tomography, single photon emission computerized tomography, and functional MRI have augmented the growing clinical evidence that these headaches originate from the brain, rather than from a purely vascular cause.³