

THALAMOMESENERIC INFARCTION PRESENTING AS VERTICAL ONE-AND-A-HALF SYNDROME WITH CONTRALESIONAL HORIZONTAL GAZE PALSY

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Vertical one-and-a-half syndrome consists of a bilateral conjugate upgaze palsy and a unilateral downward palsy or a bilateral conjugate downward palsy and a monocular upgaze palsy. We describe concurrent vertical one-and-a-half syndrome and contralesional horizontal gaze palsy in a patient with acute ischemic stroke limited to unilateral paramedian thalamus and upper midbrain. A 75-year-old man admitted to our hospital for an abrupt onset of diplopia and ptosis. on admission, neurological examination revealed bilateral ptosis, conjugate upgaze palsy, downward gaze palsy of the right eye, and conjugate gaze limitation to the left side. two hours after the onset, the patient developed the left facial palsy and mild left-sided limb weakness (MRC grade 4). The diffusion-weighted MRI of the brain showed a focal high signal intensity in the right paramedian thalamus and upper midbrain. In this case, complex combinations of vertical and horizontal ocular motor disturbances was caused by an unilateral ischemic lesion of the meso-diencephalon. The patient showed vertical one-and-a-half syndrome with bilateral ptosis, contralesional conjugate gaze palsy, and hemiparesis. The impairment of upward ocular movements can be explained by a lesion affecting the riMLF or posterior commissure. It is suggested that the horizontal gaze palsy was caused by the involvement of the descending fibres from the frontal eye fields of the cerebral cortex before decussation at the midbrain level.