Because the intracranial compartment is in contiguity with the spinal canal, which contains epidural fat and openings via neural foramen between segmental vertebra, the assumption of a rigid system is not completely accurate, but provides a useful framework for understanding ICP. The principal intracranial components (blood, CSF, and brain tissue) are in a state of volume equilibrium, and any increase in volume of one of these intracranial components must be compensated for by a decrease in volume of another; otherwise, ICP will increase [1)].

1)
Mokri B. The Monro-Kellie hypothesis: applications in CSF volume depletion. Neurology. 2001 Jun 26;56(12):1746-8. PubMed PMID: 11425944.