

At least two possible mechanisms for the development of PNC are described ¹⁾. One is the effect of the ball valve, where the air enters from the extracranial space through [Cerebrospinal fluid fistula](#), which allows input but not output. When the intracranial pressure increases, the brain, and the dura plug the fistula tract and prevent air from going out. Another theory is known as the inverted soda bottle effect. Loss occurs when the CSF for a fistula or external drainage causes negative intracranial pressure. Air enters as bubbles, replacing the CSF as the pressure in the two cavities balance. A more unusual mechanism is the production of gas in situ due to infection by germs forming gas ²⁾.

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