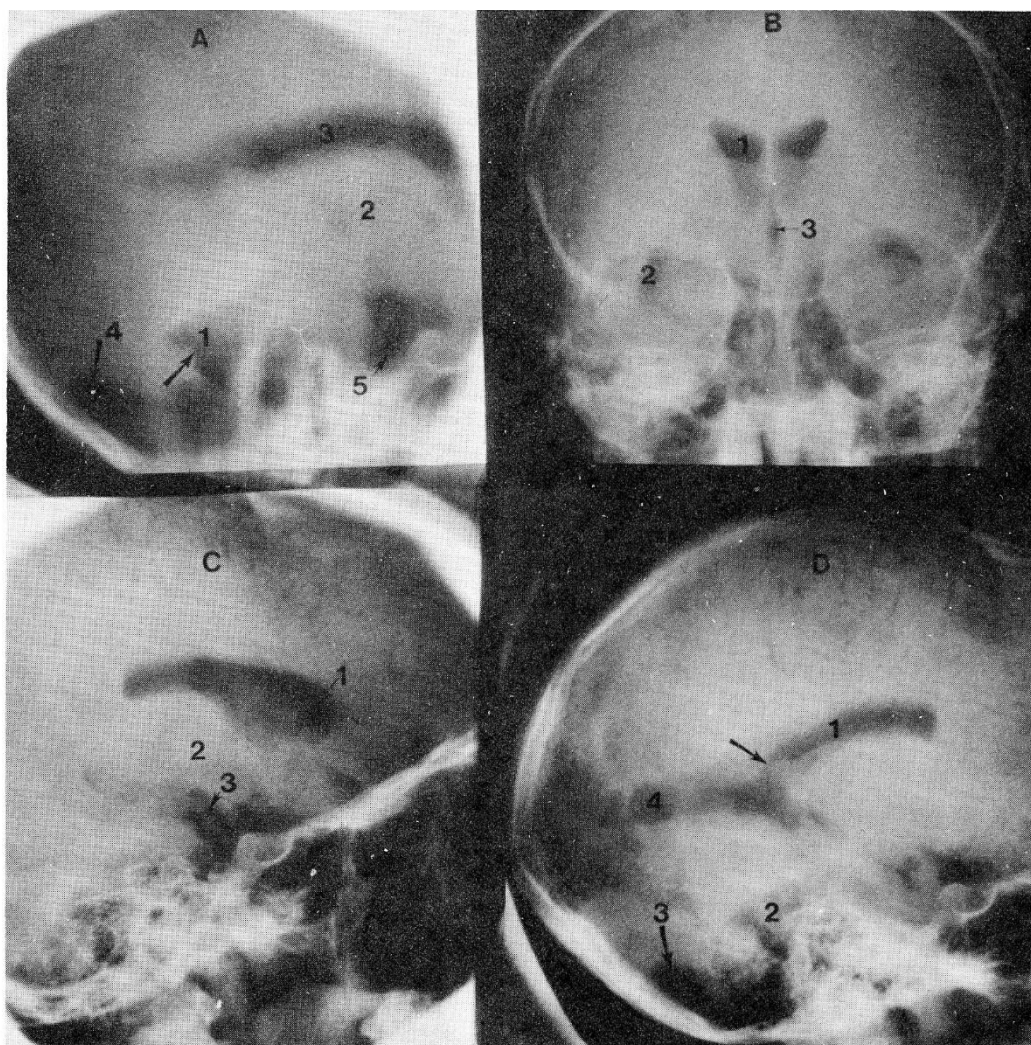


# Pneumoencephalography

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– X-ray visualization of *subarachnoid spaces* and *ventricles* by use of **gas** (such as air) contrast – obsolete neuroimaging technique!

- described by Walter Dandy in 1918.
- air is injected via:
  - a) lumbar puncture
  - b) ventricular puncture
- patient position is manipulated to accomplish air movement.



**FIGURE 110.** A normal pneumoencephalogram.

A, Erect mid-line tomogram.

1. 4th ventricle (the choroid plexus is arrowed).
2. 3rd ventricle.
3. Lateral ventricle.
4. Cisterna magna.
5. Pre-pontine cistern.

B, Anteroposterior brow-up view.

1. Body of lateral ventricle.
2. Temporal horn.
3. 3rd ventricle.

C, Lateral brow-up view.

1. Frontal horn of lateral ventricle.
2. 3rd ventricle.
3. Temporal horn.

D, Lateral brow-down view.

1. Lateral ventricle (choroid plexus arrowed).
2. 4th ventricle.
3. Cisterna magna.
4. Occipital horn.

BIBLIOGRAPHY for ch. "Diagnostics" → follow this [LINK >>](#)

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**Viktor's Notes<sup>SM</sup> for the Neurosurgery Resident**  
Please visit website at [www.NeurosurgeryResident.net](http://www.NeurosurgeryResident.net)