



# Porencephalic cyst

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- Patient details:

- 32 year old
- Multigravida
- 34 weeks + 0 days

- Referred with CNS anomaly



- Findings:
- Singleton
- Cephalic
- Posterior high placenta
- Normal liquor
- 3 vessels cord



## Findings:

BPD, HC, AC, FL all appropriate for dates EFW 1969g

Brain: single intra-cerebral cystic structure central and anterior to the cerebellum.



Management:

Patient counselled about the findings.

That the prognosis can vary from very mild to very severe neuro developmental delay.

In view of advanced gestational age - karyotyping not offered.

MRI of the fetal brain was arranged and confirmed the ultrasound findings.



Porencephalic cyst



Porencephalic cyst



- Destructive brain lesions include:
  - Porencephalic cysts, hydranencephaly and schizencephaly.
  - In porencephaly, there are intra cerebral cystic cavities that usually communicate with the ventricular system, the sub arachnoid space or both.





- Prevalence:
  - 1 in 10 000 births
  
- Etiology:
  - In utero - occlusive vascular anomalies
  - Infarction of the cerebral arteries or hemorrhage into the cerebral parenchyma.
  - Haemorrhage, + resorption of necrotic brain tissue leaving fluid filled cysts that communicate with lateral ventricle.



- Diagnosis:
- Single or multiple (CSF filled), cystic areas in the cerebral cortex, usually communicating with the ventricle.
- Generally brain symmetry is preserved, however lesions occurring early can cause midline shift and compression.
- Large expansive cysts can cause obstructive hydrocephalus.
- The differential diagnosis includes:
  - glyo-ependimal, arachnoid cysts
  - These are usually found in the scissurae or midline and compress the brain.



- *Prognosis:*
- *Is related to the size and location of the lesion and although there is an increased risk of impaired neurodevelopment in some cases, in others it can be normal.*