

# The 2008 Obstetrical MR Imaging Census

**A work in progress documenting imaging and pathologic diagnoses.**

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### Fetal CNS MR malformations – 31 cases:

- Abnormal calvarium – chromosome 9 abnormality on CGH
- Neurodevelopmental anomalies – 6 cases
  - Case 1 – schizencephaly, cerebellar hypoplasia, partial agenesis of inferior vermis, negative CGH
  - Case 2 – hypoplastic cerebellum, vermis, pons
  - Case 3 – Septo-optic dysplasia versus “isolated” agenesis of cavum septum pellucidum
  - Case 4 – Agenesis of inferior vermis with heterogeneous cortical mantle (? pseudostratified ventricular epithelium). CGH negative
  - Case 5 – Bilateral complete lissencephaly
  - Case 6 – Agenesis inferior vermis, normal outcome
- Aqueductal stenosis – 4 cases
- Dandy Walker malformation with neurodevelopmental malformation including hypoplastic brainstem, pons, aqueductal stenosis and hydrocephalus – 1 case
- Arachnoid cyst of choroidal fissure – 2 cases
  - Pineal recess – 1 case
  - Choroidal fissure – 1 case
- Abnormal corpus callosum – 4 cases
  - Complete agenesis – 2 cases
  - Partial agenesis – 1 case
  - Dysgenetic shortened, thick corpus callosum – 1 case
- Intracranial hemorrhage – 2 cases
- Mild ventriculomegaly – 6 cases
  - 5 cases – normal outcome
  - 1 case – tetrasomy 9P
- Open neural tube defect – 5 cases
  - Lumbar, sacral – 4 cases
  - Encephalocele – 1 case

### Fetal MR – extracranial face and neck – 6 cases:

- Coloboma, CHARGE syndrome – 1 case
- Soft palate defect – 3 cases
  - 1 case – isolated
  - 3 cases – associated with
    - a) Dandy-Walker malformation and aqueductal stenosis.
    - b) Skeletal dysplasia
    - c) Agenesis of inferior vermis
- Occipital hemangioma – 1 case
- Lymphangioma – 1 case

### Fetal MR – thorax – 6 cases:

- 5 cases of CCAM/BPS
- 1 case congenital diaphragmatic hernia

Fetal MR – urinary tract – 5 cases:

- PCK with anhydramnios
- Renal agenesis
- Multicystic dysplastic kidney
- Normal variant elongated bladder with patent urachal cyst
- Isolated unilateral renal agenesis

Fetal MR – abdomen (non-urinary tract) – 4 cases:

- Megacolon – Hirschsprung's versus anal atresia (postnatal diagnosis pending)
- Situs inversus totalis with right-sided colon
- Choledochal cyst
- Enlarging RUQ cyst bordering porta hepatis with normal gallbladder in male fetus – pending postnatal diagnosis – choledochal cyst versus gut duplication cyst

Fetal musculoskeletal MR – 5 cases:

- Ehlers-Danlos: bilateral hip flexion with knee extension (associated CCAM)
- Unilateral calcaneal valgus
- Arthrogryposis
- Klippel-Feil and Sprengel's deformity
- Thigh mass – pending postnatal clinical and/or surgical follow-up

Imaging of adherent placentation – increta/percreta: Obstetrical MR, TA and TV ultrasound with color Doppler – 19 cases:

- True positive increta/percreta – 11 cases (including one maternal death)
- True negative – 5 cases
- False positive – 2 cases
- False negative – 1 case (missed increta posterior lower uterine segment)