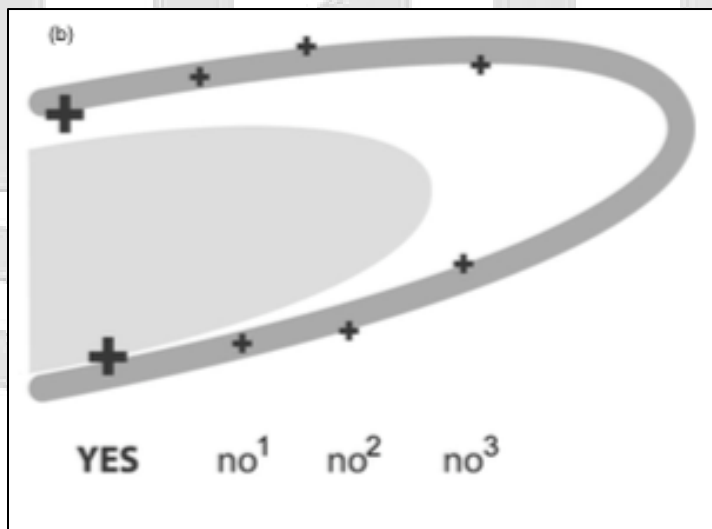
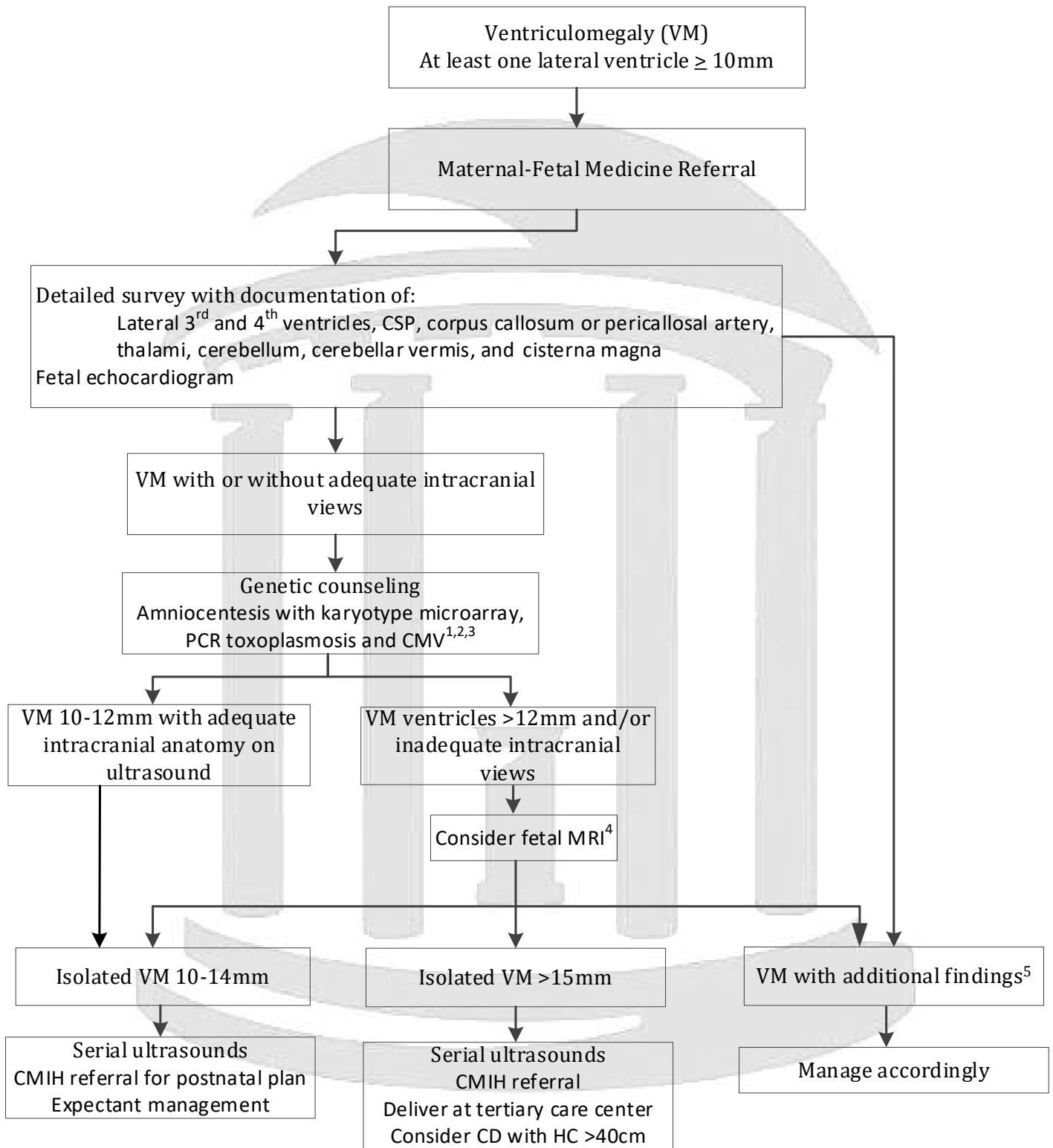


## Ventriculomegaly

- Criteria for appropriate measurement of lateral ventricle
  - Head is in axial plane
  - Image is magnified appropriately, so that fetal head fills majority of image
  - Focal zone is at appropriate level
  - Cerebral ventricles are symmetric in appearance
  - Midline falx is imaged
  - Atrium and occipital horn of lateral ventricle are clearly imaged
  - Atrium of lateral ventricle is measured at level of parietooccipital groove
  - Calipers are placed on medial and lateral walls of atrium perpendicular to long axis of ventricle





1. CMV PCR with amniocentesis at <21 weeks has poor sensitivity (45-80%) for CMV. After 21 weeks or 6-7 weeks from primary maternal infection, PCR on amniotic fluid has sensitivity of 97-100%.
2. Toxoplasmosis AF PCR should be performed at  $\geq 18$  weeks gestation and at least 4 weeks after acute primary maternal infection to avoid false negatives
3. If amniocentesis declined, cfDNA may be offered. However, the patient should be counseled regarding limitations of noninvasive screening. 10-15% of fetuses have abnormal findings on microarray. In addition, maternal serologies for CMV and toxoplasmosis are not routinely offered. Many cases of congenital infection (up to 75% of CMV) are due to nonprimary maternal infection. In addition, toxoplasmosis IgG avidity may be low for months after primary infection. Thus, maternal serologies are difficult to interpret and treatment is ultimately based on AF PCR results.
4. MRI most useful at >22 weeks gestation as development milestones (cortical maturation) are more evident
5. Additional findings may include: microcephaly, intracranial calcification, absent CSP, agenesis CC, intracranial hemorrhage, etc)

#### References:

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5. Devaseelan P. et al. Prognosis of isolated mild to moderate fetal cerebral ventriculomegaly: a systematic review. *J. Perinat. Med.* 2010;38:401-9.

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***These algorithms are designed to assist the primary care provider in the clinical management of a variety of problems that occur during pregnancy. They should not be interpreted as a standard of care, but instead represent guidelines for management. Variation in practices should take into account such factors as characteristics of the individual patient, health resources, and regional experience with diagnostic and therapeutic modalities.***

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