Dr. Cohen references for HVRA website
D101, D2020, D2050, D2700, D2070; D2000; D2010; D2030; D2040

**Obesity**

* Dashe, Obstet and Gynecol, 2009; Grace, AOG 2009
* Gilboa; AOG; 2010; 202:51.e1-10; Association between pre-pregnancy body mass index and congenital heart defects.

**Maternal Obesity and Risk for Congenital Heart Disease**

* Association between pre-pregnancy body mass index and congenital heart defect. Gilboa. Am J OBSTET Gynecol, 2010
* Pre-pregnancy body mass index and congenital heart defects among offspring: A population-based study. Madsen. Congenit Heart DIS, 2012
* Maternal overweight and obesity and the risk of congenital anomalies: A systematic review and meta-analysis. JAMA, 2009

**Universal fetal ultrasound screening**

Approximately 3% of newborns have a recognizable major anomaly and at least 5% will ultimately be diagnosed with a congenital defect. Birth defects are the single most common cause of perinatal mortality in developed countries. Because most anomalies occur in the absence of family history or known risk factors, every pregnancy must be considered at risk for significant birth defects. Congenital heart disease (CHD) is the most common, the most serious, and the most frequently missed of all fetal malformations during detailed ultrasound fetal anatomic assessment. The profound majority of CHD occurs in the low-risk general population.

* Diagnostic Imaging of Fetal Anomalies. Nyberg. p.xii.


**Genetic ultrasound**

**Universal fetal cardiac ultrasound**


Uterine Artery Doppler


Maternal biochemical analytes, adverse obstetrical outcome and uterine artery Doppler


Cardiovascular genetic ultrasound

Cardiovascular genetic/level II ultrasound has a Down syndrome risk detection (sensitivity) of 90% at a 5% false positive rate. Cardiovascular genetic/level II ultrasound when performed following first and/or second trimester screening increases Down syndrome risk detection from 90 to 99% (at a 5% false positive rate) depending upon the particular type of screening study that preceded it.


Assisted reproduction


Placental dysfunction versus constitutional normal variants

Maternal uterine and fetal umbilical and middle cerebral Doppler was necessary to distinguish nonpathologic constitutional normal variants versus impaired placentation (ICD-9 762.20) and its accompanying placenta related adverse obstetrical outcomes.


Quantitative Umbilical Venous Blood Flow Doppler


Placental Pathology and Fetal / Maternal Disease

