UNC SCHOOL OF MEDICINE

Polyhydramnios

Definition

>= 20 weeks, Singletons: AFI >= 24 cm	
	AFI (cm)
Mild	24-29.9
Moderate	30-34.9
Severe	>=35

Patient Counseling

1. Fetal/neonatal anomaly risks are associated with degree of polyhydramnios. Normal ultrasound examinations do not eliminate the risks of structural or genetic abnormalities identified postnatally.

	Risk of Fetal Abnormality	Residual risk of neonatal abnormality
Mild	6-10%	1%
Moderate	10-15%	2%
Severe	20-40%	10%

2. Although the data available in 2020 do not reflect associations of degree of polyhydramnios nor gestation age at time of diagnosis with any granularity, nor the use of micro-array or exome analysis for the most part in patients with isolated polyhydramnios, there does appear to be an increased risk of genetic abnormalities in fetuses with isolated polyhydramnios, at a rate of about 3.6% (0.6% karyotypic, 3.2% basic in microarray testing (Sagi-Dain; Chromosomal microarray analysis results from pregnancies with various ultrasonographic abnormalities. O&G, 2018).

3. Polyhydramnios confers an increased risk for macrosomia, malpresentation, abnormal active phase of labor, cesarean birth, non-reassuring fetal status in labor, abruption, stillbirth, postpartum hemorrhage, NICU admission, RDS, Transient tachypnea of the newborn, neonatal hypoglycemia

Initial Work Up

- Targeted MFM Ultrasound with special attention to growth, fetal movement & limb position, GI, CNS, lower spine, face and palate, neck position, placenta (chorioangioma) and evidence of infection including hepatosplenomegaly.
- For moderate and severe polyhydramnios MCA Dopplers on initial assessment
- Review prenatal type and screen, any infectious serology or history, diabetes screening
- If > 1 month from normal diabetic screening, consider repeat glucola
- Repeat antibody screen if > 1 month from negative screen
- If fetal abnormality identified, follow per protocol for that anomaly.

Management

Mild Polyhydramnios Non-anomalous fetus Non-diabetic mother	Moderate or Severe Polyhydramnios
• Repeat scan every 3 weeks to monitor fetal growth, reassess anatomy and assess fluid volume. • If volume normalizes, no further follow up indicated. • For persistent mild polyhydramnios, starting at 37 weeks weekly US for fetal lie, BPP. • Deliver at institution with pediatric support at delivery • Mild polyhydramnios is not an indication for early delivery; consider delivery by EDC.	• Refer to MFM and Genetic Counseling • Consider karyotype and microarray testing • Evaluate for TORCH, syphilis, Parvovirus B19 if there are additional US findings or history, or abnormal MCA Dopplers • Counsel patient re: signs and symptoms of preterm labor • Consider cervical examinations at prenatal visit • Amnioreduction reserved for severe maternal discomfort or dyspnea • Antenatal weekly monitoring starting at diagnosis to assess AFI, growth, fetal well-being, serial anatomic evaluations • Delivery by 39 weeks • Pediatricians present at delivery

All Patients with Polyhydramnios

- Enter diagnosis of polyhydramnios into problem list with plan
- Confirm fetal lie early in labor
- Alert care providers intrapartum regarding increased risk for macrosomia, post - partum hemorrhage, abruption, non-reassuring status

1. American College of Obstetricians and Gynecologists **Ultrasound in pregnancy. Practice bulletin no. 175.** *Obstet Gynecol.* 2016; **128**: e241-e256
2. Hughes DS, Magann EF, Whittington JR, Wendel MP, Sandlin AT, Ounpraseuth ST. Accuracy of the Ultrasound Estimate of the Amniotic Fluid Volume (Amniotic Fluid Index and Single Deepest Pocket) to Identify Actual Low, Normal, and High Amniotic Fluid Volumes as Determined by Quantile Regression. J Ultrasound Med. 2020 Feb;39(2):373-378. doi: 10.1002/jum.15116. Epub 2019 Aug 18. PMID: 31423632.
3. Khan S. , Donnelly J. **Outcome of pregnancy in women diagnosed with idiopathic polyhydramnios.** *Aust N Z J Obstet Gynaecol.* 2017; **57**: 57-62
4. Odibo IN, Whittemore BS, Hughes DS, Simmons PM, Ounpraseuth ST, Magann EF. Addition of Color Doppler Sonography for Detection of Amniotic Fluid Disturbances and Its Implications on Perinatal Outcomes. J Ultrasound Med. 2017 Sep;36(9):1875-1881. doi: 10.1002/jum.14223. Epub 2017 May 15. PMID: 28503847
5. SMFM Consult Series #46: Evaluation and management of polyhydramnios. SMFM; Jodi S Dashe, Eva K Pressman, Judith U. Hubbard. AJOG October 2018.:219 (4);pB2-B8. https://doi.org/10.1016/j.ajog.2018.07.016

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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