

STANDARD OPERATING PROCEDURE- GUIDELINE

POLYHYDRAMNIOS IN A SINGLETON GESTATION

APPLICABILITY:

Maternal Fetal Medicine Division physicians
Obstetrics and Gynecology Division physicians
Family Planning Division physicians
Midwifery Division CNMs

PURPOSE:

Amniotic fluid disorders present to us on a daily basis. This standard operating procedure clarifies the definition and diagnosis of excess amniotic fluid.

DEFINITIONS:

Polyhydramnios (hydramnios) is defined as an excessive accumulation of amniotic fluid (AF). It affects 1 to 2 % of all gestations.

PROCEDURE:

The measurement of the amount of amniotic fluid can be performed by two techniques. The two most common are the Maximum Vertical Pocket (MVP) and the Amniotic Fluid Index (AFI).

Controversy exists regarding the best method to evaluate the amount of amniotic fluid (AF). It has not been demonstrated that perinatal outcomes are improved by using the AFI. Because of the lack of clinical benefit of the AFI and the concern that it may lead to non-evidence based interventions, the University of New Mexico utilizes the MVP for evaluation of amniotic fluid volume.

I. Diagnosis

The diagnosis of polyhydramnios is made when the MVP is ≥ 8 cm.

The degree of polyhydramnios is frequently categorized as mild, moderate, or severe, based on An MVP of 8 to 11 cm, 12 to 15 cm, or > 16 cm, respectively. Using these definitions, mild polyhydramnios accounts for approximately 65-70% of cases, moderate polyhydramnios for 20%, and severe polyhydramnios for $<15\%$. The likelihood of an underlying fetal abnormality is significantly higher with greater degrees of polyhydramnios.

Identification of polyhydramnios should prompt a search for an underlying etiology. Although mild polyhydramnios is most commonly idiopathic, the 2 most common pathologic causes of polyhydramnios are maternal diabetes mellitus and fetal anomalies. Other causes of polyhydramnios include congenital infection and alloimmunization. Physiologically, the fluid increase in many of these cases can be attributed to 1 of 2 mechanisms: (1) impaired fetal swallowing, or (2) overproduction of fetal urine due to a high output cardiac state, renal abnormality, or osmotic fetal diuresis.

When no etiology for the excess amniotic fluid is identified, polyhydramnios is termed “idiopathic.” Idiopathic polyhydramnios is a diagnosis of exclusion, and a predisposing condition may become evident with advancing gestation or after delivery. Therefore, polyhydramnios with no identified cause in the prenatal period may also be referred to as unexplained.

II. Management

Polyhydramnios severe enough to cause maternal respiratory compromise, significant discomfort, or preterm labor often has an underlying etiology, whereas idiopathic polyhydramnios, because it is usually mild and does not present until the mid-third trimester, does not typically require treatment.

In selected cases, however, amnioreduction may be considered in an effort to relieve maternal dyspnea or discomfort. We recommend that amnioreduction be considered only for the indication of severe maternal discomfort, dyspnea, or both in the setting of severe polyhydramnios.

We recommend that indomethacin not be used for the sole purpose of decreasing amniotic fluid in the setting of polyhydramnios.

- Antepartum management recommendations:
 - Antenatal fetal surveillance is not required for the sole indication of mild idiopathic polyhydramnios
 - Labor should be allowed to occur spontaneously at term for women with mild idiopathic polyhydramnios. Induction, if planned, should not occur at <39 weeks of gestation in the absence of other indications; the mode of delivery should be determined based on usual obstetric indications.
- Intrapartum management recommendations:
 - Women with severe polyhydramnios should deliver at a Level IV maternity care center due to the significant possibility that fetal anomalies may be present

TABLE 2
Outcomes of polyhydramnios based on severity


	Amniotic fluid index	Deepest vertical pocket	Incidence	Risk of fetal abnormality ^a	Risk of neonatal abnormality ^b
Polyhydramnios, overall, cm	≥24.0	≥8.0	0.3–1.0%		
Mild, cm	24.0–29.9	8–11	65–70% of total	6–10%	1%
Moderate, cm	30.0–34.9	12–15	20% of total	10–15%	2%
Severe, cm	≥35.0	≥16	<15% of total	20–40%	10%

^a Chance that fetal anomaly will be identified prenatally.^{9,23,25} ^b Chance that neonatal abnormality will be identified in cases without a detected prenatal anomaly. Society for Maternal-Fetal Medicine. Polyhydramnios. Am J Obstet Gynecol 2018.

REFERENCES:

Dashe JS, Pressman EK, Hibbard JU. Society of Maternal Fetal Medicine. www.smfm.org. SMFM Consult Series #46: Evaluation and management of polyhydramnios. Am J Obstet Gynecol 2018.

APPROVALS:

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