

Gastroschisis

Purpose: To provide guidelines for screening and management of fetal gastroschisis complicating pregnancy. Gastroschisis is one of a group of birth defects known as abdominal wall defects, which occur very early in gestation and are characterized by an opening in the abdominal wall of the fetus. It occurs in approximately 1 in 5,000 live births.

1. Initial evaluation
 - a. A targeted ultrasound is recommended to rule out associate anomalies.
 - b. The prevalence of chromosomal abnormalities in fetuses with isolated gastroschisis is not increased above the baseline population risk.
 - c. Fetal genetic evaluation is only recommended if other non-gastrointestinal structural abnormalities are identified on ultrasound examination.
 - i. Microarray molecular testing rather than G-banding has been recommended whenever fetal structural anomalies are detected on prenatal ultrasound examination.
2. Assessment of fetal growth and amniotic fluid volume
 - a. Perform serial ultrasound every 2 to 4 weeks to assess fetal growth and amniotic fluid volume.
 - b. Fetuses with gastroschisis often have intrauterine growth restriction (IUGR).
 - c. If IUGR is diagnosed, manage according to guidelines established in the IUGR protocol.
3. Assessment of fetal bowel
 - a. Perform serial targeted sonographic evaluation of the stomach and bowel (both intra- and extra-abdominal) to look for significant dilatation (>25mm) or acute changes (eg, thickening, edema).
 - b. If changes described above are observed prior to 34 weeks, administer glucocorticoids to enhance fetal maturation in the event preterm delivery is indicated.
4. Antepartum fetal surveillance: Initiate non-stress testing twice weekly and/or a biophysical profile for all fetuses with gastroschisis upon diagnosis of growth restriction, oligohydramnios, or at 32 weeks in absence of such complications.
5. Consultations prior to delivery
 - a. Refer the patient to Pediatric Surgery.
 - b. Refer the patient to Neonatology.
6. Timing of Delivery: Fetuses with gastroschisis, without further complications of growth restriction, oligohydramnios or non-reassuring fetal testing, are delivered in the early term period at 38 weeks without amniocentesis.
7. Route of Delivery
 - a. There is no evidence that cesarean delivery improves outcomes in uncomplicated gastroschisis.
 - b. Surgical delivery should be reserved for usual obstetric indications.
 - c. Delivery should occur at a tertiary care center with neonatology present.

SHMG Maternal Fetal Medicine has developed these guidelines as a reference tool to assist referring physicians. Obstetric medical needs are complex and these guidelines may not apply in every case. SHMG Maternal Fetal Medicine relies on referring providers to exercise their own professional medical judgment with regard to the appropriate treatment and management of their patients. Referring providers are solely responsible for confirming the accuracy, timelines, completeness, appropriateness and helpfulness of this material in making all medical, diagnostic, or prescription decisions.



References:

Al-Kaff et al. Am Jour Obstet Gynecol, 2015; Carnaghan et al., J Ped Surg, 2014; Logghe et al. J Ped Surg, 2008

How et al. Am J Obstet Gynecol, 2000; Boutros et al. J Ped Surg, 2009, Abdel-Latif et al. J Ped Surg, 2008).

SHMG Maternal Fetal Medicine has developed these guidelines as a reference tool to assist referring physicians. Obstetric medical needs are complex and these guidelines may not apply in every case. SHMG Maternal Fetal Medicine relies on referring providers to exercise their own professional medical judgment with regard to the appropriate treatment and management of their patients. Referring providers are solely responsible for confirming the accuracy, timelines, completeness, appropriateness and helpfulness of this material in making all medical, diagnostic, or prescription decisions.