



AT THE FOREFRONT

**UChicago
Medicine**

Department of Obstetrics & Gynecology

Physician Connect

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ABNORMAL PLACENTATION PROGRAM

Patient appointments

Call **773-702-6118** or
1-844-UC-FETAL
(1-844-823-3825)
Email womenshealth@uchospitals.edu
or visit
[uchicagomedicine.org/
abnormal-placenta](http://uchicagomedicine.org/abnormal-placenta)

Roxane Holt, MD, and
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see patients in:

**Hyde Park
Duchossois Center for
Advanced Medicine
(DCAM)**
5841 S. Maryland Avenue
Third Floor

Schererville, Indiana
222 Indianapolis Blvd.
Suite 101

BRIEFINGS FROM WOMEN'S HEALTH EXPERTS

UPDATED

Managing Abnormal Placentation

by Roxane Holt, MD

What is abnormal placentation?

Abnormal placentation includes both placenta previa and morbidly adherent placenta, a category which includes placenta accreta, placenta increta, and placenta percreta. As the number of cesarean deliveries increase, we have seen an increase in morbidly adherent placentas. The incidence was last assessed as one in 533 pregnancies (1982-2002).

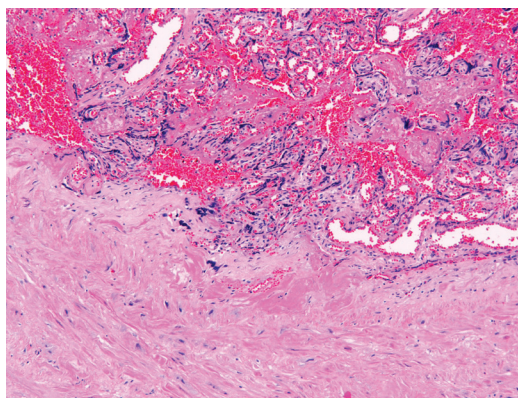
Placenta previa occurs when the placenta covers the internal cervical os. Placenta accreta involves an abnormal attachment to the myometrium; placenta increta invasion into the myometrium; and placenta percreta invasion through the uterine serosa. In the absence of an accreta, placenta previa can be regarded as a mild complication requiring a cesarean delivery that will usually proceed without further complications other than a possible transfusion.

When a placenta previa is identified, the placenta should be thoroughly evaluated, especially in the setting of prior cesarean delivery. Ultrasound can be performed to identify markers associated with morbidly adherent placentas. These markers include loss of the echolucent line behind the placenta, abnormal vasculature and irregularities of the uterine serosa-bladder interface, placental lakes, especially four or more, and a thin myometrium.

If a previa is present without a prior cesarean, then the risk of accreta is 3 percent. When placenta previa is present with a history of cesarean delivery, the risk of an accreta increases with the number of prior cesareans. After one cesarean, the risk of an accreta is 11 percent when previa is present in the subsequent pregnancy. After two prior cesareans, the risk of an accreta increases to 40 percent if previa is present in the next pregnancy. The risk of accreta increases to 61 percent after three prior cesareans and 67 percent after four or more cesareans in the setting of a previa. Unfortunately, cesarean delivery with a placenta accreta is fraught with complications.

When a morbidly adherent placenta is suspected on ultrasound, a multidisciplinary approach has been shown to improve outcomes. The treatment for most women that have a pregnancy complicated by placenta accreta is a planned cesarean hysterectomy. The placenta is not manipulated during the delivery because profound hemorrhage can occur when the placenta is tugged on, which can lead to significant morbidity and even death for the mother. When a placenta accreta is present and a hysterectomy is performed, there are additional risks including a 12 to 15 percent risk of cystotomy, 23 to 27 percent risk of intensive care unit stay, and 5 to 11 percent risk of reoperation. During cesarean hysterectomy, there is an average transfusion of five units of blood in 75 percent of patients and some will receive a massive transfusion of more than 10 units of blood.

(over)



Hysterectomy specimen from a 26-year-old female showing placenta (upper half) attached directly to the myometrium (lower half) without any decidua diagnostic for placenta accreta (hematoxylin and eosin stain, original magnification 100x).

Photo credit: Aliya N. Husain, MD

For these reasons, we recommend referral of these patients to a tertiary center for care by a multidisciplinary team that can work together to decrease these morbidities. To avoid labor, delivery is panning at 34 0/7-35 6/7 weeks in absence of bleeding complications.

Who should be referred for imaging of suspected accreta?



Ultrasound showing placenta with numerous irregular placental lakes
Photo credit: Roxane Holt, MD

Clinical indications

- » Prior cesarean delivery (especially multiple)
- » Placenta previa
- » History of endometrial ablation
- » Previous uterine surgery
- » First & second trimester bleeding with risk factors for placenta accreta

Sonographic indications

- » Abnormal placental appearance
- » Abnormal uterine shape
- » Abnormal vascularity of myometrial wall
- » Current or previous cesarean ectopic

Which patients should be referred for delivery?

- » Suspicion for placenta accreta on sonogram
- » Placenta previa with abnormal ultrasound appearance
- » Placenta previa with ≥ 3 prior cesarean deliveries
- » History of classical cesarean delivery and anterior placentation
- » History of endometrial ablation or pelvic irradiation
- » Inability to adequately evaluate or exclude findings suspicious for placenta accreta in women with risk factors for placenta accreta
- » Any other reason for suspicion for placenta accreta
- » Desired termination of pregnancy in the setting of abnormal placentation
- » Management of cesarean and cervical ectopic pregnancies

What abnormal placentation services are offered at the University of Chicago Medicine?

Our team has expertise in both the imaging and delivery of patients with abnormal placentation, including those with morbidly adherent placentas. We offer a thorough evaluation of your patient and full transfer of care if a placenta accreta is suspected. We give obstetricians the peace of mind that comes from knowing that their patients will be well cared for through prenatal care, delivery and recovery.

Our established multidisciplinary team includes leaders in maternal-fetal medicine (Roxane Holt, MD), ultrasonography (Jacques Abramowicz, MD), gynecologic oncology (John Moroney, MD), obstetric anesthesia (Barbara Scavone, MD), family planning (Sadiah Haider, MD, MPH), labor and delivery nursing, gynecologic nursing, neonatal intensive care, abdominal MRI radiology (Aytek Oto, MD, MBA), transfusion services and pathology (Ricardo Lastra, MD).

What can your patient expect?

The initial visit consists of a consultation and ultrasound to evaluate the mother, the baby and the placenta. In some cases, an MRI may be performed at the University of Chicago Medicine. Our multidisciplinary team carefully plans the surgical management of a pregnancy complicated by accreta. In most cases, we will formulate, together with your patient, a plan for a scheduled preterm cesarean hysterectomy. However, if we find that the risk is low, we will send your patient back to your practice.

We also have a contingency plan in the event that your patient requires expedited or emergent delivery due to preterm labor or hemorrhage. Along the way, we will continue to update you on the plan, and will send you a full report after delivery.

References

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