SMFM Coding Committee White Paper: Coding for Placenta Accreta Spectrum

Placenta accreta is defined as an abnormal invasion of all or part of the placenta into the myometrial wall of the uterus. Placenta accreta spectrum (PAS) is the more current terminology to refer to the range of abnormal placental invasion that includes placenta accreta, increta and percreta. The incidence of PAS has been steadily increasing, ranging from 1 in 200 to 1 in 500 pregnancies (1,2). Placenta accreta spectrum disorder was first described in the 1930s (3), over time progressing to being graded into 3 categories: placenta accreta, increta and percreta (4,5). These are histological grades, and rarely can the grade be diagnosed prior to pathologic examination. More recently the terminology placenta accreta spectrum disorder (PAS in the remainder of this paper) has been used to encompass all grades and variations of this disease. The prenatal diagnosis of PAS is paramount to optimizing management and decreasing morbidity and mortality associated with the disease (6,7,8). Undiagnosed PAS can lead to a variety of unfavorable outcomes, including emergent cesarean hysterectomy, disseminated coagulopathy, multi-organ failure, permanent disability and even death. When PAS is accurately diagnosed in the prenatal period, this provides the opportunity for a scheduled delivery at a tertiary care center, utilizing a multidisciplinary team with expertise in the management of accreta. This approach has been shown to significantly decrease maternal morbidity and mortality (9, 10, 11), and is strongly recommended by the American College of Obstetricians and Gynecologists (12) as well as the Society for Maternal Fetal Medicine (13).

In 2015, the ACOG and the SMFM developed guidelines designating "levels of maternal care" (14). PAS is considered a high-risk condition warranting level III (subspecialty) or higher care. In order to ensure the patient is cared for and/or transferred to the appropriate institution, early and accurate diagnosis of the condition is necessary. There are several risk factors for PAS the most common being prior cesarean delivery, but also advanced maternal age, multiparity, prior uterine surgery, prior uterine curettage, presence of a previa on ultrasound, presence of a cesarean scar pregnancy on ultrasound, and Asherman syndrome. Patients are routinely referred to maternal fetal medicine subspecialists with concerns for suspected invasive placental disorders, either due to risk factors or findings on ultrasound.

The resulting evaluation of the placenta requires thorough investigation for accurate diagnoses, and the role of ultrasound in this diagnosis has been well studied and documented. A growing body of evidence has demonstrated that ultrasound is the preferred method of evaluation for placenta accreta spectrum disorders (15, 16, 17, 18, 19). PAS is most often diagnosed in the second and third trimesters, typically at the time of the anatomy ultrasound. Women with risk factors for PAS should be evaluated by providers with expertise and experience in advanced ultrasound imaging. Ultrasound has reported sensitivity > 90% and specificity > 96% in the diagnosis of PAS. It is advisable whenever possible to refer women with clinical risk factors or worrisome ultrasound findings to centers with experience and expertise in imaging and diagnosis of this condition. Especially given the high frequency of undiagnosed PAS, referral to experts may increase the rate of antenatal diagnosis.

Currently, the detailed fetal anatomic survey (CPT 76811) is performed in situations where there are increased risks for fetal abnormalities and aneuploidy. While this is not an all-inclusive list, clearly demonstrated is the breadth of indications for a detailed fetal anatomic survey. When performing a detailed fetal anatomic survey, all the components of a routine survey are collected in addition to multiple additional fetal, placental and maternal components. Ultrasounds performed for evaluation of suspected invasive placental abnormalities require increased time for examination, higher resolution ultrasound equipment, and it is recommended that this exam be done in centers with increased experience to decrease the risk of false negative diagnosis; these factors should be reflected in the CPT codes used for billing.

There are multiple, well-known sonographic findings associated with placenta accreta spectrum disorders (20, 21, 22, 23, 24, 25). One such finding is the loss of the hypoechoic retroplacental zone. This occurs when there is a loss of the clear zone that is normally seen between the placental basal plate and the myometrium, due to myometrial thinning. Specifically, myometrial thinning to less than 1mm, or to where it is undetectable, has been used in the diagnosis of PAS. Ultrasound can also identify abnormalities in the uterine serosa-bladder interface, either with a placental bulge or irregularities of the usually smooth, wide, thin line of the bladder. This signifies placental invasion into the myometrium, and potential spread into the bladder. The most common ultrasound sign seen in PAS is the finding of numerous placental lacunae, and appear as sonolucent intraplacental spaces. Other terms used to describe these spaces are placental lakes or a “swiss cheese” appearance.

In addition to the findings above, increased vasculature in the placenta can be seen with PAS. This can appear as turbulent lacunar blood flow, enhanced with color or power Doppler imaging, increased subplacental vascularity, gaps in myometrial blood flow and bridging vessels from the placenta to the uterine myometrium or at the uterine-vesicular interface (22, 23, 24). Of the findings listed, those most strongly associated with PAS are multiple placental lacunae and turbulent flow (24, 25). Color flow Doppler should be used for color flow evaluation of the placenta in the case of suspected PAS. At this time, there is no color flow Doppler CPT code that can be utilized in this scenario; CPT 93976 is utilized for duplex scan of flow in pelvic organs, but is not for use in pregnancy.

All of the above findings require expertise and precision in evaluation, which includes both knowledge of the sonographic findings as well as increased time in evaluation of these components. When PAS is not suspected, this detailed evaluation of the placenta with gray scale and color flow Doppler is not routinely performed. The above listed sonographic signs should not be used independently to diagnose PAS, as they individually may have low sensitivity and specificity for PAS. Rather, the combination of ultrasound findings and correlation with clinical history can significantly increase detection rates. The risk factors for PAS include prior cesarean delivery, placenta previa, advancing maternal age, prior uterine surgery, multiparity, endometrial ablation, uterine irradiation and smoking. Using these risk factors with the presence/absence of sonographic signs greatly improves the rates of accurate diagnosis of PAS.

Studies have shown varying sensitivity rates using ultrasound for the prenatal diagnosis of PAS; these sensitivities vary, but range from 70-90% (15, 16, 24) as noted earlier. The majority of published guidelines recommend the use of ultrasound for diagnosis of PAS, with magnetic resonance imaging (MRI) use as an adjunct if needed (17, 26). A recent study was performed evaluating if MRI is a useful adjunct to ultrasound in the diagnosis of PAS; their results demonstrated that MRI correctly changed the diagnosis in 19% of cases, correctly confirmed the diagnosis in 44%, but incorrectly changed the diagnosis in 17% (26). The study concluded that, given the high cost and limited clinical value, MRI should not be routinely used as an adjunct to ultrasound in the detection of PAS. Utilizing ultrasound is likely to decrease the rates of misdiagnosis, and decrease utilization of MRI.

When ultrasound is utilized specifically for and in the evaluation of a diagnosis of PAS, the SMFM Coding Committee recommends the following:

· Detailed fetal anatomic scan (**76811**)
Ultrasound, pregnant uterus, real time with image documentation, fetal and maternal evaluation plus detailed fetal anatomic examination

· Vaginal U/S (**76817**) - if indicated
Ultrasound, pregnant uterus, real time with image documentation, transvaginal. Can be reported if vaginal scanning is performed to assess placental location and/or bladder or lower uterine segment invasion.

The following ICD-10 indication codes can be reported when coding for PAS:

- O43.21x, Placenta Accreta. Last digit to report trimester
- O43.22X, Placenta Increta
- O43.23X Placenta Percreta
- Z03.72 Encounter for suspected placental problem, not found

When performing follow up imaging for PAS, the typical 76816 code should be utilized.

Clinical Coding Scenarios:
1. A 26 year old G2P1001 presents to your office for her anatomy ultrasound. Her medical history is complicated by one prior low transverse c-section. Her placenta is anterior over the prior c-section scar. You evaluate the placenta during your imaging visit, and there is NO evidence of placenta accreta or abnormal implantation. CPT 76805 may be billed as there is no evidence of PAS, and the patient was not referred for suspected PAS.

2. A 26 year old G2P1001 presents to your office from her OB for her anatomy ultrasound at 20 weeks. She has one prior c-section. Your sonographer notices that the placenta is low positioned, over the prior c-section scar. Utilizing color Doppler she sees clearly bridging vessels, lacunae, and myometrial wall thinning. She notifies you she is concerned for placenta accreta. CPT 76811 may be billed, in addition to CPT 76817 if

utilized for transvaginal imaging of the placenta. 76811 would be indicated due to concerning findings on ultrasound, requiring a detailed evaluation of the placenta.

3. A 26 year old G2P1001 presents to the office from her primary OB. She has a history of one prior c-section. Her primary OB has performed an ultrasound for anatomy at 18 weeks and suspects an abnormal placentation, potentially a percreta. The fetal anatomy is unremarkable on outside imaging. The primary OB refers the patient to your MFM office. The patient presents to you at 22 weeks for further evaluation. CPT 76811 may be billed, in addition to CPT 76817 if utilized for transvaginal imaging of the placenta, as the indication for referral was concern for PAS.

4. In the same patient, from case 3 above, the placenta is abnormally implanted. You have confirmed this as you performed color Doppler of the placenta. You note abnormal bridging vessels that penetrate into the bladder. You have a high suspicion for placenta increta or percreta. There is currently no method to bill for the additional work of color Doppler in the case of suspected PAS. CPT 76811 may be billed, in addition to CPT 76817 if utilized for transvaginal imaging of the placenta.

5. A 26 year old G2P1001 is confirmed on your imaging to have a placenta accreta. You bring her back at 28 weeks, to re-evaluate and start surgical planning. The fetal survey was unremarkable earlier this pregnancy. The patient has not developed any new complications (i.e. no GDM, no CHTN). This follow-up ultrasound should be billed as CPT 76816

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