Uterus and Placenta, Accreta/Percreta

(6.7 Uterus and Placenta); Created February 4th, 2020 by Jeremy Deisch, MD; updated April 28th, 2022 by Jeremy Deisch, MD

SAMPLE DICTATION

(Labeled: ___, ___; ___) Received ___ [fresh, in formalin] is an ___ gram intact hysterectomy specimen that measures ___ x ___ x ___ cm. The uterine cervix measures ___ x ___ x ___ cm, with a ___ cm cervical os. The bilateral adnexal structures [are/are not] attached to the uterus [if present, give measurements for each tube and ovary present]

Major pathologic finding(s): The uterine serosa [shows a ___ x ___ cm linear/irregular defect located ___] *or* [is smooth and glistening, free of defect]. The ___ x ___ x ___ cm placental disc is adherent to the [right/left/anterior/posterior/fundic] aspect of the endometrial cavity, with the edge of the placental disc lying with ___ cm from the cervical canal. The placenta [invades ___ cm of the ___ cm thick myometrium] *or* [does not grossly invade the myometrium]. The placental lies ___ cm from the serosa in the deepest focus of mural invasion, which is located ___. The deepest point of invasion lies ___ cm from the cervical os, ___ cm from the right ampulla, and ___ cm from the left ampulla. The fetal membranes are [light tan/green and transparent/opaque]. The ___ x ___ x ___ cm [trivascular] umbilical cord inserts ___ cm from the disc edge [or mention if insertion is velamentous]. The uninvolved endometrium is ___ cm thick.

Other findings: *Describe any endometrial polyps, masses, myometrial nodules, tubal cysts, ovarian lesions, etc*

Specimen Handling: (RS, ___ caps; Gross photographs taken)

SUGGESTED SAMPLING

1,2: Full thickness section showing deepest deepest focus of placental invasion into the myometrium
3,4: Additional sections showing interface between placenta and myometrium
5: Site of serosal perforation (if present)
6,7: Full thickness endomyometrium, remote from placental attachment site
8: Two sections of membrane “jelly roll”
9: Two cross sections of umbilical cord
10: Full thickness sections of placental parenchyma (if too thick, trim off maternal aspect)
11: Full thickness placental parenchyma (if too thick, trim off fetal aspect)
12: Anterior uterine cervix
13: Posterior uterine cervix
14: Right fallopian tube
15: Left fallopian tube
16: Right ovary
17: Left ovary

IMPORTANT NOTE - ALWAYS TAKE GROSS PHOTOGRAPHS!! - The placental accreta subspecialty clinicians are requesting photographs for clinicopathologic correlation as well as for teaching purposes. Photographs demonstrating the specimen as received, showing the placental attachment site, and one showing the deepest area of invasion would be useful for these purposes.

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ADDITIONAL CONSIDERATIONS

- Placental accreta, increta, and percreta comprise a spectrum of disorders in which the placenta is abnormally implanted to the uterine wall. This results in increased risk of antepartum or postpartum hemorrhage and difficulty in postpartum delivery of the complete placenta and retained placental tissue.
    - **Placental accreta**: No intervening layer of decidua between placenta and myometrium; chorionic villi lie in direct contact with myometrial smooth muscle. No myometrial invasion.
    - **Placental increta**: Placenta invades partial thickness myometrial smooth muscle
    - **Placental percreta**: Placenta invades full-thickness myometrial smooth muscle; serosal perforation may or may not be present.
- As described above in the sample dictation, gross sampling of these specimens is similar in complexity to the approach for grossing large complex specimens with tumors (except there are no “margins”). The following data points need to be assessed:
    - Where is the placenta attached to the endometrial cavity?
    - How close is the placenta to the lower uterine segment and cervix? Placenta accreta is more common in the lower uterine segment owing to the poorly-developed decidua, and this finding correlates with antepartum hemorrhage.
    - How far away is the placental disc from the cervical canal? If it is within 2 cm, this is sufficient for a diagnosis of placental previa.
    - How deep does the placental tissue invade the myometrial wall? Give depth of invasion in cm, as well as the myometrial thickness in the region of interest.
    - Is there serosal perforation in the region of myometrial invasion?
    - Are there any regional uterine abnormalities associated with the area of placental attachment? Placental accreta is also associated with pre-existing abnormalities, such as prior C-section scars or uterine structural abnormalities.
    - Where is the deepest point of placental invasion of the myometrium? For this, provide three reference point measurements to allow for radiologic/pathologic correlation - 1) Distance of deepest point of invasion to the **cervical os** (external), 2) Distance to the **right ampulla** (attachment point of fallopian tube/broad ligament to uterine corpus, also external), and 3) Distance to the **left ampulla**. These measurements allow our clinical colleagues to “triangulate” the deepest point of invasion, and to correlate with assessments made prior to delivery/hysterectomy.
- After describing and sampling to answer the above questions, the uterine, placental, and adnexal structures are sampled as per routine.