
HYSTERECTOMY WITH PLACENTA – ACCRETA

RA.SP.PR.GR.GY.09.r00

- I. Purpose**
To provide a procedure for the gross examination of a postpartum hysterectomy specimen with attached placenta.
- II. Principle**
To take histologic sections to demonstrate the pathologic process, including extent of accreta so that a diagnosis can be made microscopically by a Pathologist.
- III. Equipment**
1. Ruler
 2. Forceps
 3. Scalpel
 4. Scissors
 5. Large Knife
- IV. Special Safety Precautions**
1. PPE should be worn.
 2. **FORMALIN** is a known carcinogen.
- V. Supplies and Reagents**
1. **10% NEUTRAL BUFFERED FORMALIN** (pH range 6.9-7.2)
- VI. Quality Control**
All remaining tissue should be retained.
- VII. Limitations/Notes**
The following may influence the validity of test results:
1. The specimen should be fixed in formalin.
 2. For optimal results, the specimen should be opened and fixed overnight.

HYSTERECTOMY WITH PLACENTA – ACCRETA

VIII. Procedure

1. Review Ultrasound, MRI, and clinical notes in the patient's chart to establish the expected anatomy, including the extent and location of placental invasion, involvement of the surrounding structures such as the bladder, areas of surgical injury (that must be distinguished from true uterine rupture in percreta), placenta previa, and whether the cervix was also removed. The imaging findings should be correlated with the gross findings. If these cannot be correlated, staff should be called.
2. Weigh and measure the uterus (typically a supracervical hysterectomy), documenting if the cervix is attached.
3. Ink the non-serosal surface of the uterus including the parametria, and anterior and posterior lower uterine segment.
4. Examine the uterine serosa, noting any areas of disruption. If percreta is suspected, ink these areas a different color from the parametria. This will often be a narrow zone representing the prior c-section scar.
5. Note the location and presence of cesarean section scar/incision site.
6. Note if placental tissue is seen bulging out of the cervical opening (placenta previa).
7. Bivalve the uterus into anterior and posterior halves (preferably done at triage with overnight fixation).
8. Note the location of the placenta in the uterus (e.g., previa/low lying/normal within the upper uterus/anterior vs. posterior implantation).
9. Bread-loaf the uterine wall through the attached placenta from fundus to lower uterine segment looking for areas of increta/percreta. The anterior lower uterine segment will always be thin due to physiologic dilation, especially in women with prior cesarean section. In an area of increta, the myometrium under the placental disc will have localized areas of thinning.
10. Note the location of the accreta with respect to landmarks (lower uterine segment, cord insertion, cervix). Note if the accreta is focal, affecting only certain areas of the placenta or if it is more diffuse, affecting the whole disc.
11. Note the depth and extent of invasion of the placenta into the uterine wall (e.g., superficial invasion vs. deeper invasion). Note how deep the placenta invades and if it invades through the wall to involve any other structures (e.g., bladder).
12. Describe the placental parenchyma, including any lesions (e.g., infarct or hematoma) with measurements.
13. Describe the uninvolved endometrium and myometrium. Describe and measure any additional uterine pathology, including fibroids.
14. If the cervix is attached, measure the cervix and describe the ectocervical mucosa. Ectocervical mucosa may be difficult to identify on gross exam as it will be markedly thinned.
15. Submit full thickness sections (minimum of four) demonstrating placenta at greatest depth of invasion to attached uterus. Take sections of areas showing abrupt transition from thick to thin myometrium rather than random sections from thinned regions of the lower uterine segment.
16. Submit a section of scar/incision site if identified.
17. Submit representative sections of placental disc, including any identified lesions.

Printed copies of this document are not considered up-to-date. Please verify current version date with online document.

HYSTERECTOMY WITH PLACENTA – ACCRETA

18. Submit two sections of cervix or LUS to represent placenta previa and ectocervix (if present).
19. Submit full thickness sections of uninvolved uterine endomyometrium. Including any identified fibroids or lesions.
20. Load on the appropriate end of day processor to allow for adequate fixation.

IX. References

1. Dannheim K, Shainker SA, Hecht JL. Hysterectomy for placenta accreta; methods for gross and microscopic pathology examination. Arch Gynecol Obstet. 2016 May;293(5):951-8. doi: 10.1007/s00404-015-4006-5. Epub 2016 Jan 12. PMID: 26758078.
2. Hecht, J. L., Baergen, R., Ernst, L. M., Katzman, P. J., Jacques, S. M., Jauniaux, E., Khong, T. Y., Metlay, L. A., Poder, L., Qureshi, F., Rabban, J. T., Roberts, D. J., Shainker, S., & Heller, D. S. (2020). Classification and reporting guidelines for the pathology diagnosis of placenta accreta spectrum (PAS) disorders: recommendations from an expert panel. *Modern Pathology*, 33(12), 2382–2396. <https://doi.org/10.1038/s41379-020-0569-1>
3. Hruban RH, Westra, WH, Phelps, PH, & Isacson, C: Surgical Pathology Dissection An Illustrated Guide, New York, NY, Springer-Verlag Inc., 1996.
4. Lester, SC: Manual of Surgical Pathology, New York, NY, Churchill Livingstone, 2001.

X. Authorized Reviewers

1. Medical Director, Anatomic Pathology
2. Chief, Surgical Pathology

XI. Document Control

Location of Master: Master electronic file stored on the Beaumont Laboratory server under S:\AP_Grossing_Manual

Number of Controlled Copies posted for educational purposes: 0

Number of circulating Controlled Copies: 1

Location of circulating Controlled Copies: Master Grossing Manual located in Surgical Pathology

Printed copies of this document are not considered up-to-date. Please verify current version date with online document.

