###### Purpose

To provide a procedure for the gross examination of an ovary.

1. **Principle**

To take representative histologic sections. If a pathologic process is present, sections should be submitted that demonstrate the process so that a diagnosis can be made microscopically by a Pathologist. If the specimen has been removed for prophylactic purposes, submit the entire specimen.

###### Equipment

1. Ruler
2. Scale
3. Forceps
4. Scalpel
5. Scissors
6. **Safety**
7. **PPE** should be worn.
8. **FORMALIN** is a known carcinogen.
9. **Supplies and Reagents**
10. **10% NEUTRAL BUFFERED FORMALIN** (pH range 6.9 – 7.2)
11. Black Ink
12. White Distilled Vinegar
13. **Quality Control**

All remaining tissue should be retained.

1. **Limitations/ Notes**

The following may influence the validity of test results:

1. The specimen should be fixed in formalin.
2. Overnight fixation may be necessary if the specimen has a friable nature.
3. **Procedure**
4. The specimen will arrive fresh or in formalin.
5. Weigh and measured in 3 dimensions (cm.).
6. If a fallopian tube is attached, measure in 2 dimensions (cm.). Note if a fimbriated end is present.
7. Describe the external surface of the ovary (and ink black if for tumor), paying close attention to any rupture sites or areas of involvement by tumor.
8. If the ovary is cystic, it should be opened carefully. Describe the cyst contents (serous, mucinous, or hemorrhagic) and measure (cc.). Describe the inner lining of the cyst or cysts (if multiloculated) and any papillary or solid areas that are present.
9. If the ovary is solid, the cut surfaces should be described.
10. Describe any residual ovarian parenchyma (ex: corpora lutea, corpora albicantia, simple cysts).
11. If a fallopian tube is present, describe the serosa and serially section to identify a lumen.
12. If the fallopian tube has a fimbriated end, cut the distal 2.0 cm of the specimen including the fimbriae, then cut longitudinally, and submit on edge in a separate cassette.
13. One section for each centimeter of the tumor’s largest dimension is generally recommended, with modification based on the degree of heterogeneity of the tumor and the difficulty of diagnosis. Borderline (atypical proliferative) serous tumor, borderline serous tumors with micropapillary features/noninvasive low-grade serous carcinoma, borderline (atypical proliferative) mucinous tumors, and benign mucinous tumors require more sections (2 sections for each centimeter of the tumor’s largest dimension is recommended in such cases). Some sections should include the ovarian surface where it is most closely approached by tumor on gross examination, with the number of sections depending on the degree of suspicion of surface involvement. Tumor adhesions and sites of rupture should be sampled and labeled specifically for microscopic identification.
14. Sample any residual ovarian parenchyma in one or two cassettes.
15. If the specimen has been removed for prophylactic purposes, submit all tissue.
16. The cassettes should be submitted on the appropriate processor to allow for proper fixation and processing.
17. **References**

Hruban RH, Westra, WH, Phelps, PH, & Isacson, C: Surgical Pathology Dissection An Illustrated Guide, New York, NY, Springer-Verlag Inc., 1996.

Lester, SC: Manual of Surgical Pathology, New York, NY, Churchill

Livingstone, 2001.

Krishnamurti, MD, PhD, U.G. et al. “Protocol for the Examination of Specimens From Patients With Primary Tumors of the Ovary, Fallopian Tube, or Peritoneum” *College of American Pathologists.* Version: 1.3.0.1. November 2021.

1. **Authorized Reviewers**
2. Medical Director, Anatomic Pathology
3. Chief, Surgical Pathology

##### 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 Manuallocated in Surgical Pathology

##### Document History

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Signature | Date | **Revision #** |  | **Related Documents****Reviewed/****Updated** |
| Prepared by: *Anne Tranchida, PA(ASCP)* | 10/14/2009 | **r00** |  |  |
| Approved by: *Ali-Reza Armin, MD* | 10/24/2009 | **r00** |  |  |
|  |  |  |  |  |
| **Reviewed by: (Signature)** | **Date** | **Revision #** | **Modification** | **Related Documents****Reviewed/****Updated** |
| *Ali-Reza Armin, MD* | 10/20/2011 | **r00** |  |  |
| *Ali-Reza Armin,MD* | 04/03/2013 | **r00** |  |  |
| *Mitual B. Amin,MD* | 02/14/2015 | **r00** |  |  |
| *Zhenhong H. Qu, MD* | 03/19/2015 | **r00** |  |  |
| *Kurt Bernacki, MD* | 10/27/2017 | **r00** |  |  |
| *Kurt Bernacki, MD* | 10/22/2019 | **r00** |  |  |
| *Kurt Bernacki, MD* | 10/20/2021 | **r00** |  |  |
| Revised by: Heather Genson, HTL(ASCP)CMPACM | 03/16/2022 | **r01** | Updated to CAP guidelines sampling 1-2 sections per cm |  |
| Approved by: *Kurt Bernacki, MD* | 3/16/2022 | **r01** |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |