Protocol for the Examination of Biopsy Specimens From Patients With Primary Carcinoma of the Vagina

Version: Vagina Biopsy 4.2.0.0
Protocol Posting Date: August 2019

Accreditation Requirements
The use of this protocol is recommended for clinical care purposes but is not required for accreditation purposes.

This protocol may be used for the following procedures AND tumor types:

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biopsy</td>
<td></td>
</tr>
<tr>
<td>Tumor Type</td>
<td>Description</td>
</tr>
<tr>
<td>Carcinoma</td>
<td>Includes squamous cell carcinoma, adenocarcinoma and variants, carcinosarcoma, neuroendocrine carcinoma, and mixed epithelial – neuroendocrine tumors</td>
</tr>
</tbody>
</table>

The following should NOT be reported using this protocol:

<table>
<thead>
<tr>
<th>Procedure</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Resection (consider the Vagina Resection protocol)</td>
<td></td>
</tr>
<tr>
<td>Cytologic specimens</td>
<td></td>
</tr>
</tbody>
</table>

The following tumor types should NOT be reported using this protocol:

<table>
<thead>
<tr>
<th>Tumor Type</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lymphoma (consider the Hodgkin or non-Hodgkin Lymphoma protocols)</td>
<td></td>
</tr>
<tr>
<td>Sarcoma (consider the Soft Tissue protocol)</td>
<td></td>
</tr>
</tbody>
</table>

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With guidance from the CAP Cancer and CAP Pathology Electronic Reporting Committees.

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Summary of Changes
Version 4.2.0.0
Resection and biopsy case summaries separated into discrete cancer protocols
Surgical Pathology Cancer Case Summary

Protocol posting date: August 2019

VAGINA: Biopsy

Note: This case summary is recommended for reporting biopsy specimens, but is not required for accreditation purposes. Core data elements are bolded to help identify routinely reported elements.

Select a single response unless otherwise indicated.

Procedure (Note A)
___ Incisional biopsy
___ Other (specify): ___________________________
___ Not specified

Tumor Site
___ Vagina, upper third
___ Vagina, middle third
___ Vagina, lower third
___ Not specified

Histologic Type (Note B)
___ Squamous cell carcinoma, NOS
___ Squamous cell carcinoma, keratinizing
___ Squamous cell carcinoma, nonkeratinizing
___ Squamous cell carcinoma, basaloid
___ Squamous cell carcinoma, verrucous
___ Squamous cell carcinoma, warty
___ Squamous cell carcinoma, papillary
___ Adenocarcinoma, NOS
___ Mucinous carcinoma, NOS
___ Endometrioid carcinoma
___ Clear cell carcinoma
___ Mesonephric carcinoma
___ Adenosquamous carcinoma
___ Adenoid basal carcinoma
___ Small cell neuroendocrine carcinoma
___ Large cell neuroendocrine carcinoma
___ Undifferentiated carcinoma
___ Carcinosarcoma
___ Other histologic type not listed (specify): ___________________________
___ Carcinoma, type cannot be determined

Note: Microinvasive/superficial invasive carcinoma is not currently a recognized entity in the vagina, and thus the term is not used.

Histologic Grade (Note C)
___ G1: Well differentiated
___ G2: Moderately differentiated
___ G3: Poorly differentiated
___ G4: Undifferentiated
___ Other (specify): ___________________________
___ GX: Cannot be assessed
___ Not applicable
Tumor Extension
___ Stromal invasion
___ Muscle invasion
___ Cannot be assessed

Margins
___ Not applicable
___ Cannot be assessed
___ Uninvolved by tumor
___ Involved by tumor
   Specify site: ___________________________

Additional Pathologic Findings (select all that apply) (Note D)
___ None identified
___ High-grade squamous intraepithelial neoplasia (VAIN 2-3)
___ Low-grade squamous intraepithelial neoplasia (VAIN 1)
___ Condyloma acuminate
___ Adenocarcinoma in situ (AIS)
___ Atypical adenosis
___ Other (specify): ___________________________

Comment(s)
A. Procedure

Prenatal DES Exposure
Prenatal exposure to diethylstilbestrol (DES) or related synthetic drugs was relatively common in the United States and other countries until 1971, when its relation to clear cell adenocarcinomas of the vagina and cervix led to proscription of these drugs by the Food and Drug Administration. From the 1970s to the turn of the 21st century, most patients with clear cell adenocarcinoma of the vagina had a history of DES exposure. As this cohort ages, the diagnosis has been less common, and most women with this diagnosis currently have no DES exposure history. Furthermore, it has been reported that these patients have significantly worse outcomes than do patients with history of DES exposure and patients with squamous cell carcinoma. A bimodal age peak for DES-related carcinoma has, however, been recently reported, and therefore a history of this type of prenatal drug exposure should alert the pathologist to the possible presence of those tumors and associated lesions.

Ectropion (erosion, eversion) of the cervix, which is characterized by the appearance of glandular (columnar) epithelium outside the external os of the cervix, is seen in approximately 90% of women exposed to DES in utero (but is often seen in nonexposed women as well). Approximately one-third of patients exposed to DES have 1 or more gross structural abnormalities of the cervix.

The fallopian tubes are abnormal in some women exposed to DES in the form of hypoplasia or defects demonstrated on hysterosalpingographic examination.

References

B. Histologic Type
The World Health Organization (WHO) classification and nomenclature of vaginal tumors is recommended because of its wide acceptance. The most common subtype is squamous cell carcinoma. However, when such tumor simultaneously involves the cervix or the vulva and the vagina, the tumor is considered to originate from the
cervix or vulva, with secondary extension to the vagina. Also, when an adenocarcinoma is present in the vagina, it is important to keep in mind that many of those tumors represent secondary involvement either by direct extension or metastases, more commonly from the endometrium, colorectal, ovary, vulva, urethra, and urinary bladder. Although not included in the current WHO classification, primary intestinal type adenocarcinoma has recently been described in the vagina.² These tumors usually arise in a background of benign adenomatous lesion. Awareness of this new subtype is necessary to avoid misdiagnosis of a metastatic colorectal adenocarcinoma.²⁻⁴

WHO Classification¹
Precancerous Lesions and Carcinomas of the Vagina (Modified)

Epithelial Tumors
Squamous tumors and precursors
Squamous intraepithelial lesions (SIL) Vaginal intraepithelial neoplasia (VAIN)
  Low-grade SIL (LSIL) VAIN 1
  High-grade SIL (HSIL) VAIN 2-3

Squamous cell carcinoma, not otherwise specified
  Keratinizing
  Nonkeratinizing
  Papillary
  Basaloid
  Verrucous
  Warty
Glandular tumors
  Clear cell carcinoma
  Endometrioid adenocarcinoma
  Mucinous adenocarcinoma
  Mesonephric adenocarcinoma
High-grade neuroendocrine carcinoma
  Small cell neuroendocrine carcinoma
  Large cell neuroendocrine carcinoma
Other epithelial tumors
  Adenosquamous carcinoma
  Adenoid basal carcinoma
  Undifferentiated carcinoma

References

C. Histologic Grade
No specific grading system for vaginal cancers is recommended. For the sake of uniformity, however, it is suggested that 3 grades be used, as shown below, with grades 1 to 3 assigned to carcinomas showing squamous or glandular differentiation.

Grade X Cannot be assessed
Grade 1 Well differentiated
Grade 2  Moderately differentiated  
Grade 3  Poorly differentiated  
Grade 4  Undifferentiated  

D. Other Lesions

Squamous dysplasia or carcinoma in situ, adenocarcinoma in situ, or atypical adenosis, particularly if such changes are at the resection margin, may increase the frequency of recurrent tumor. Also, few cases of primary invasive carcinoma of vagina have been reported to occur in association with severe vaginal prolapse.1-3

References