

With the advent of AJCC TNM and Collaborative Staging, some registries either lost touch with or never were exposed to this method of staging. It was decided that Directly Coded Summary Staging would be required from all reporters for CDC's National Program of Cancer Registries (NPCR -- not CS derived). Registries that report to the CoC or SEER will need to meet additional criteria as set forth by the ACoS or the National Institutes of Health (NIH).

The following slides will look at how a Registrar needs to approach Summary Staging. It will be a review for some and new information for others. It was decided that Directly Coded Summary Staging would be required from all reporters for CDC's National Program of Cancer Registries (NPCR; not CS derived). Registries that report to the American College of Surgeons or SEER will have to meet additional criteria as set forth by the ACoS or the NIH.

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# **Directly Coded Summary Staging**

- Summary Staging (known also as SEER Staging) bases staging of solid tumors solely on how far a cancer has spread from its point of origin.
- It is an efficient tool to categorize how far the cancer has spread from the original site as the staging categories are broad enough to measure the success of cancer control and other epidemiologic efforts
- Summary Stage uses all information available in the medical record as it is a combination of clinical and pathologic information on the extent of disease
- □ Information within four (4) months of diagnosis

As the slide states, Summary Staging is based only on whether or how far a malignancy has spread and is an efficient method of assigning that information in a usable format. It is the most basic staging system and is utilized for staging most solid tumors. It should be noted that in the SEER Summary Staging Schema, Kaposi Sarcoma, Lymphomas and Hematopoietic Diseases are addressed. The schemas are not the same methodology as the solid tumors but Registrars need to be aware they are provided.

Summary Staging timing is limited to information obtained through the completion of surgeries in the first course of treatment, or within 4 months of diagnosis in the absence of disease progression; whichever is longer.

# To Begin the Staging Process, Abstractors Should Always Review:

**History and Physical Exam** 

**Radiology Reports** 

**Operative Reports** 

**Pathology Reports** 

**Medical Consults** 

**Pertinent Correspondence** 

3

# Determining how a Tumor Should be Staged requires the Registrar to:

- □ Read the Physical Exam and Work Up documents.
- □ Read operative and pathology reports.
- □ Review imaging reports for documentation of any spread.
- Become familiar with the anatomy of the endometrium and the regional and distant lymph node chains.
- Refer to the online manuals regularly and periodically check
  the site for updates and/or changes.

4

When staging <u>corpus uteri cancers</u>, Registrars need to familiarize themselves with the <u>anatomy of the endometrium and the lymphatic chains</u> associated with the it. Physical Exam reports will indicate if the physician identified any palpable abnormalities. The exam may include "sounding" which will provide the depth of the uterus. The depth does not differentiate tumors but is of interest to the physician to obtain a complete picture.

Operative, pathology and imaging reports need to be carefully scrutinized. An examination under anesthesia, or EUA, will provide additional information. Imaging using pelvic ultrasound can identify abnormalities. Radiologic studies such as IVP, CT scans, MRI, PET or Bone scans can assist the physician in identifying extent of disease. Lab tests are not used commonly for diagnostic procedures but may be used to monitor responsiveness to therapy. Endoscopy is frequently used to evaluate lesions. Operative reports will provide the registrar with size of tumor, nodes, margins and information about extent of disease. It is also critical to review the text of the surgeon to look for information re: seeding or other terms indicating tumor spread.

# **Assigning the Correct Summary Stage Code**

Nine possible codes for Summary Stage

- □ 0 = In-Situ
- □ 1 = Local
- □ 2 = Regional disease by direct extension only
- □ 3 = Regional disease with only regional lymph nodes involved
- □ 4 = Regional disease by both direct extension and regional lymph node(s)
- □ 5 = Regional disease that is not otherwise specified
- □ 7 = Distant sites or distant lymph node involvement
- 8 = Benign and borderline CNS tumors
- 9 = Unknown if there is extension or metastatic disease (unstaged, death certificate only cases)

5

Summary Staging is correctly assigning one of nine single-digit codes that describes the tumor extent at the time of diagnosis. There are nine codes that can be assigned in general, but only 8 possible for most cancers. Code 8 is used for benign and borderline CNS tumors.

The codes for Summary Stage are in ascending order, starting with the most minimal tumor involvement or growth up to distant spread. A thorough evaluation of the medical record(s) documentation will normally provide the information for the accurate coding of Summary Stage.

An in-depth explanation of the Summary Stage categories can be found at http://seer.cancer.gov/tools/ssm/.

Code 9, or unknown stage should be used only when all efforts to establish the stage of disease have been exhausted, it is an unknown primary site, or it is a death certificate only case (which can only be assigned by the central cancer registry).

Code 5 or Regional, NOS should likewise only be assigned when a more specific regional stage cannot be determined.

These lists are extremely important when assigning a Summary Stage. For example: a tumor "adherent to" or "probable" are considered involvement by tumor. Staging could be seriously miss assigned if the Registrar is not aware that both terms are important

when determining tumor extent. SEE page 15

# **Important for Registrars to Know**

Available in the SEER Summary Staging Manual 2000 are 2 lists of Ambiguous Terminology with terms that clarify whether or not a finding is part of the malignant process.

These lists instruct the registrar to either:

\* Consider as Involvement

OR

\* Do Not Consider as Involvement

# **Become Familiar With How Cancers May Spread**

- Lymphatic Spread is often evident in any of the following: aortic, iliac, parametrial, paracervical, and sacral lymph node chains.
- □ Hematogenous Spread is most commonly found in bone, liver, lung or brain.

The Registrar should become familiar with the pertinent information on how and where endometrial cancers usually might spread either regionally or distant.

7

# **Corpus Uteri is Composed of 3 Anatomic Structures**

- □ Endometrium (Mucosa)
  - Columnar Epithelium
    - o This has no blood vessels or lymphatics
  - Basement Membrane
  - Stroma (Lamina Propria)
    - Connective tissue contains blood vessels, nerves and glands in some regions
- Myometrium 3 layers
- □ Serosa (Tunica Serosa)

The three structures of the corpus uteri are the endometrium which is comprised of three areas as shown on the slide. It is important to know that once a tumor has progressed through the basement membranes and invaded the lamina propria, it can now spread by lymphatics and blood vessels to other parts of the body.

8

# What does In-Situ Mean?

- ☐ In-situ is defined as malignancy without invasion.
  - Only occurs with epithelial or mucosal tissue
  - Sarcomas cannot be in situ
- <u>Must be microscopically diagnosed</u> to visualize the basement membrane.
  - In-situ of the endometrium may also be referred to as noninvasive, pre-invasive, non-infiltrating (or used to be called FIGO Stage 0; current FIGO no longer has a stage 0).
- If pathology states the tumor is in-situ with microinvasion it is <u>no longer</u> staged as in-situ but is considered to be at least a localized disease.

In-situ disease is coded as Summary Stage 0.

In-situ tumors are found on the surface of the organ and microscopically have characteristics of malignant tumor. However, an in-situ lesion has not yet invaded or penetrated through the basement membrane. It is important to ascertain that the in-situ lesion has been microscopically evaluated.

A diagnosis of in-situ with *microinvasion* takes it out of the in-situ stage and it is considered at least localized. These microinvasive cells are now able to penetrate and be carried through the lymphatic system or blood and invade other organs. It is important to know that in-situ stage is assigned for carcinoma and melanomas but sarcomas are never described as in-situ.

# Staging In-situ Cancers Requires Knowledge of a Specific Exception

In-situ is a non-invasive malignancy and is coded as Summary Stage  ${\bf '0'}$ 

#### **UNLESS**

- Primary Tumor was documented in the pathology report as having only an in-situ behavior but there is an additional statement confirming malignancy has spread and is present in a local, regional node(s) or distant site.....
- Should that occur, the in-situ stage is not valid and the stage must be documented to reflect the regional or distant disease.

Once again an important reminder that there is an exception to staging in-situ. If there is evidence of local, regional or distant disease spread from the documented in-situ primary site found – it can no longer be considered in-situ.

10

### What does Localized Mean?

Localized corpus uteri cancer is a malignancy which is

- ☐ Confined to the endometrium (stroma)
- ☐ Myometrium/serosa (or tunica serosa) of the corpus invasion
- ☐ Localized, NOS or FIGO stage I with no further information

Localized disease is coded as Summary Stage 1.



\*\*FIGO stages in summary stage are not current and may not be used

Localized disease or Summary Stage 1 simply means that the **tumor has not spread beyond the myometrium or serosa of the corpus**. The Registrar must review all medical record documentation to confirm there are no nodes or other areas of tumor involvement.

11

# **Staging of Regional Disease**

- Review records to confirm that tumor extent is more than localized.
- Review all pertinent reports looking for specific regional disease references and exclusions of distant spread. Terms to watch for are seeding, implants and nodules – scrutinize diagnostic reports for regional disease spreading references to eliminate that spread is not distant.

<u>Caution</u>: A diagnosis of cancer with lymph node metastases means involvement by tumor – always confirm that the lymph nodes are regional.

Regional disease can be present in many sites – lymph nodes and direct extension. With the drainage in the lymphatic channels from the tumor site, a cell or cells from the tumor can result in lymph nodes anywhere in the body to become involved. It is extremely important that the Registrar evaluate whether nodal involvement is regional or distant before assigning the stage.

### What Does Regional Disease Mean?

Regional Disease indicates that the tumor has gone beyond the organ of origin but is not considered distant.

- Regional by direct extension (code 2)
  Tumor has invaded surrounding organ(s) or adjacent tissues. May also be referred to as direct extension or contiguous spread.
- Regional to lymph nodes (code 3)
  Tumor cells may have traveled through the lymphatic system to regional lymph nodes where they remain and begin to "grow."
- Regional by direct extension and lymph nodes (code 4)
  Extension into adjacent structures or organs and
  lymph node involvement are both present.
- Regional (as stated by the physician but the site[s] of regional spread is/are not clearly documented) (code 5)

Regional disease has many avenues of presentation. Regional by direct extension or contiguous spread (Coded as 2) occurs when the tumor invades into adjacent tissue or organs. Review the record to be certain that there are no nodes or distant tumor involvement before assigning this code.

- Tumor has extended to or has involved the cervix uteri.
- Tumor has progressed to regional endocervical glandular involvement.
- Tumor has progressed to Cervical Stromal invasion.

Regional to lymph nodes or code 3 indicates that tumor cells have found their way to node(s) that are considered regional and have actively begun "to grow." The record should document that nodal involvement is the only disease other than the primary in order to assign code 3.

Regional by both direct extension and involving regional lymph nodes is coded as 4.

Code 5 indicates there is a physician statement that patient has regional breast cancer but no other documentation.

If there is lymph node involvement but the chain is not named in the records, assume that the chain is regional.

The SEER manual has a comprehensive listing of these and other regional presentations. It is recommended you refer to it when assigning the regional direct disease status.

13

# **Regional by Direct Extension**

Direct extension regional Disease of the endometrium includes several possible sites. These include extension to, or involvement of:

- Cervix uteri, NOS
- Endocervical glandular involvement only
- Cervical Stromal Invasion
- FIGO stages listed in Summary Stage
  2000 are not current and may not be used



Regional by Direct Extension is coded as Summary Stage 2.

# Regional by Direct Extension cont'd

- □ Tumor has extended or metastasized to any of following sites:
  - Fallopian tube(s)
  - Broad, Round or Uterosacral Ligaments
  - One or both ovaries
  - Parametrium
  - Pelvic Serosa#
  - Pelvic tunica serosa#
  - Ureter\*
  - Vulva\*
- □ Cancer cells in ascites@
- □ Cancer cells in peritoneal washings@
- □ FIGO stages in summary stage are not current & may not be used

\*Considered distant in Historic Staging

@Not specifically categorized in Historic Staging or SS 1977

Regional by Direct Extension is coded as Summary Stage 2.

15

# Regional by Direct Extension cont'd

Tumor has extended or metastasized to any of the following sites:

- □ Extension or metastasis\*#
  - Bladder, NOS excluding mucosa
  - Bladder wall
  - Bowel wall, NOS
  - Rectum, NOS excluding mucosa
  - Vagina\*
  - Pelvic wall(s)#
- □ FIGO stages in summary stage are not current and may not be used

\*Considered distant in Historic Staging #Considered distant in SS 1977

Regional by Direct Extension is coded as Summary Stage 2.

16

# **Regional Lymph Node Involvement Only**

Tumor cells may have traveled through the lymphatic system to regional lymph nodes where they remain and begin to "grow."

- □ Aortic, NOS Includes lateral aortic or lumbar, para-aortic and periaortic#
- □ Iliac Includes common, external, and internal or hypogastic, obturator
- □ Paracervical#
- Parametrial
- □ Pelvic, NOS
- Sacral, NOS Includes lateral sacral or laterosacral; middle, promontorial or Gerota's node; presacral; and uterosacral#
- □ FIGO stages in summary stage are not current and may not be used

#Considered distant in SS 1977

Regional by Lymph Node Involvement only is coded as Summary Stage 3.

Regional to lymph nodes or Code 3 indicates that tumor cells have found their way to node(s) that are considered regional and have actively begun "to grow." The record should document that nodal involvement is the only disease other than the primary in order to assign Code 3.

# **Regional Nodes for Corpus Uteri** ☐ Aortic, NOS# Lateral or lumbar Para-aortic Periarotic ☐ Iliac Common External Internal or hypogastric, NOS o Obturator Paracervical# Parametrial Pelvic, NOS #Considered distant in SS 1977 Regional to Lymph Nodes is coded as Summary Stage 3. 18 Regional Lymph Nodes cont'd ☐ Sacral, NOS# Lateral or laterosacral Middle (promontorial or Gerota's Node) Presacral ☐ FIGO stages in summary stage are not current & may not be ☐ Regional Nodes, NOS #Considered distant in SS 1977 Caution: Endometrial cancers with lymph node metastases means involvement by tumor – always confirm that the lymph nodes are regional. Regional to Lymph Nodes is coded as Summary Stage 3. 19 **Regional Disease by Direct Extension and Lymph Nodes** • Regional Extension from the primary site into: adjacent structures or organs · and lymph nodes involvement are both present.

20

Regional disease by both direct extension and lymph nodes is coded as Summary Stage 4.

# When to Code Regional, NOS

- It is unclear if the tissues involved are regional direct extension or lymph nodes
- Physician statement says "Regional disease" with no additional documentation in the medical record.

Regional Disease with no further information is coded as Regional – NOS – Summary Stage 5

21

# **Read Carefully**

Carcinoma of the corpus uteri with *metastasis* to <u>regional</u> lymph nodes.

- This indicates that the involved lymph nodes are those that are the first to drain from the primary site and should be staged as regional to lymph nodes.
- Don't be misled by the term metastases It doesn't always mean distant disease.

Many Registrars new to the field have been confused with the term "metastases." It is important for them to realize that the term means spread and can be regional or distant. This is a reason to become familiar with what is and what is not regional vs. distant sites.

22

### Staging Endometrium-Important Notes to Remember

- □ Adnexa is defined as tubes, ovaries and ligaments
- ☐ Frozen pelvis means tumor extends to the pelvic sidewall(s). With no statement of involvement, code these cases as regional by direct extension. (With Historic Staging and SS 1977 these cases were coded as distant).
- ☐ If the physician states adnexa palpated with no mention of lymph nodes, the Registrar should assume nodes are not involved.
- If exploratory or definitive surgery was done with no mention of lymph nodes assume nodes are not involved.
- □ Sounding of the corpus is no longer a prognostic factor as it was in the past.
- □ Extension to bowel or bladder mucosa must be proven by biopsy. This is to rule out bullous edema.

Important to Know: This schema is also be used for sarcomas of the myometrium in SS2000. Note: AJCC has separate staging in their corpus uteri chapter for sarcomas versus carcinomas.

There are some areas that have caused some concern with Registrars and some of those areas are problems due to changes between the Summary Staging Guides. These notes are a few of the concerns that have been found when staging endometrium cancer.

In Summary Stage, the same schema is used to code carcinoma and sarcomas of the corpus uteri.

In the TNM staging system, there are separate rules for staging carcinomas, versus sarcomas.

# What is Distant Stage (code 7)?

Distant Stage indicates that the tumor has spread to areas beyond the regional sites.

- □ These sites may be called:
  - Remote
  - Metastatic
  - Diffuse
- Distant lymph nodes are those that are not included in the drainage area of the primary tumor.
- Hematogenous metastases develop from tumor cells carried by the bloodstream and begin to grow beyond the local or regional areas.



Distant metastases is the spread by tumor through blood or lymphatics that carry tumor cells to areas of the body beyond the primary or regional areas. While there are several sites that are normally expected to be involved in distant spreading, metastatic disease can occur in any distant site.

If there is evidence of spread but the terminology does not match any of the in the various categories in the manual, try to research the terms to match them. If there is no match, it is assumed the site is distant.

24

# **Distant Sites and Nodes**

### □ Distant lymph node(s):

- Inguinal, NOS
- Deep, NOS
  - Node of Cloquet or Rosenmuller (highest deep inguinal)
  - Superficial inguinal (femoral)\*
- Other Distant Lymph Nodes

### ■ Extension to:

- Bladder mucosa (excluding bullous edema)#
- Bowel Mucosa#
  FIGO stages in
- FIGO stages in summary stage are not current and may not be used



\*Considered distant in Historic Staging #Considered distant in SS 1977 Distant metastases is the spread by tumor <u>usually</u> through blood or lymphatics that carry tumor cells to areas of the body beyond the primary or regional areas. <u>In some instances</u>, <u>direct spread goes beyond the regional site and directly into a distant site</u>. While there are several sites that are normally expected to be involved in distant spreading, metastatic disease can occur in any distant site.

If there is evidence of spread but the terminology does not match any of the in the various categories in the manual, try to research the terms to match them. If there is no match, it is assumed the site is distant.

25

### Distant Sites and Nodes cont'd

### □ Further contiguous extension#:

- Abdominal serosa (peritoneum)
- Cul de sac (rectouterine pouch)
- Sigmoid colon
- Small intestine

### Metastasis

 FIGO stages in summary stage are not current and may not be used

#Considered regional in Historic Staging

Tips for the Abstractor
If review of the patient's records documents distant metastases, the registrar can avoid reviewing records to identify local or regional disease.
Pathology reports that contain a statement of local, regional or metastatic spread cannot be staged as in-situ even if the pathology of the tumor states it.

- ☐ If there are nodes involved, the stage must be at least regional.
- □ If there are nodes involved but the chain is not named in the pathology report, assume the nodes are regional.
- If the record does not contain enough information to assign a stage, it must be recorded as unstageable.

# Exercise 1- How Would You Stage This Case?

- Patient presented with abnormal vaginal bleeding. Physical examination was within normal limits – no abdominal masses or lymphadenopathy noted. Uterus and cervix did not reveal any abnormalities.
- MRI was ordered and noted right fundal endometrium consistent with carcinoma. Further workup including CT of abdomen and pelvis did not reveal any additional abnormality.
- Patient underwent a total abdominal hysterectomy with bilateral salpingooophorectomy with pathology noting moderately differentiated adenocarcinoma in the endometrium. No invasion of the myometrium, tubes or ovaries.

28

Stage Case....Answer on next slide



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- MRI was ordered and noted right fundal endometrium consistent with carcinoma. Further workup including CT of abdomen and pelvis did not reveal any additional abnormality.
- Patient underwent a total abdominal hysterectomy with bilateral salpingooophorectomy with pathology noting moderately differentiated adenocarcinoma in the endometrium. No invasion of the myometrium, tubes or ovaries.
- □ Summary Stage 1 Localized.

# Exercise 2 - How Would You Stage This Case?

- □ Patient presented with light spotting. No urinary frequency or incontinence. Normal findings with a speculum exam. Uterus was without tenderness. Rectovaginal exam did not find any rectal masses.
- □ Ultrasound noted only a thickened endometrial stripe. Chest and abdominal/pelvic CT within normal limits.
- Pathology from the total abdominal hysterectomy and bilateral salpingo oophorectomy revealed a well differentiated adenocarcinoma with invasion of the myometrium of 1.5 mm. No nodes present and therefore were unable to be assessed.

30

Stage Case....Answer on next slide



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- Pathology from the total abdominal hysterectomy and bilateral salpingo oophorectomy revealed a well differentiated adenocarcinoma with invasion of the myometrium of 1.5 mm. No nodes present and therefore were unable to be assessed.
- Summary Stage 1 localized, based on CT not showing regional involvement and no nodes resected.

# Exercise 3 – How Would You Stage This Case?

- Patient presented with complaints of urinary incontinence. Physician ordered an IVP with findings negative for kidney and ureters issues but a pelvic mass was identified which appeared to be compressing the bladder.
- An endometrial biopsy was identified as adenocarcinoma. Hysterectomy was done and the carcinoma was found to be invading the myometrium.
   Six pelvic nodes were involved.

Stage Case....Answer on next slide







