# Cancer Case Scenario 1

**Emergency Room Visit-1/25/16.**

This patient is a 75-year-old female who reports that over the last week she has had intermittent abdominal pain which has gotten progressively worse. She reports her pain is severe and is now most focused in the left lower quadrant. She has had some bloating, but no nausea or vomiting. Last bowel movement was 4 days ago. A CT scan of the abdomen showed an obstruction in the small bowel and an enlarged gallbladder. She was admitted to the hospitalist service and an emergency laparotomy was performed. The surgeon noted lesions suggestive of malignancy throughout the peritoneal cavity. The largest lesion was located on the surface of the liver. Both ovaries were involved with extension from the left ovary to the bowel wall. The surgeon removed the gallbladder, performed a small bowel resection and biopsied lesions in the pelvis and mesentery. The patient was referred to a gynecologic oncologist for additional work-up and treatment.

**1/25/16**

**SURGICAL PATHOLOGY REPORT:**

**Clinical Information:**

**Clinical History:** Abdominal pain;

Specimen Tissue:

1. Gallbladder
2. Soft Tissue, Other than tumor/mass/lipoma: Right pelvis
3. Soft Tissue, Other than tumor/mass/lipoma: Mesenteric nodule
4. Small intestine, Resection. Small bowel possible cancer on surface
5. Appendix

A: Gallbladder excision:

- CHRONIC CHOLECYSTITIS.

- CHOLELITHIASIS.

B: Right pelvis, biopsy:

- **INVOLVED BY ADENOCARCINOMA, CONSISTENT WITH OVARIAN ORIGIN**.

C: Mesenteric nodule, biopsy:

- **INVOLVED BY ADENOCARCINOMA, CONSISTENT WITH OVARIAN ORIGIN.**

D: Small intestine, segmental resection:

- **SEROSAL INVOLVEMENT BY POORLY DIFFERENTIATED ADENOCARCINOMA,**

**CONSISTENT WITH OVARIAN ORIGIN.**

E: Appendix, excision: NO DIAGNOSTIC ABNORMALITY.

**Evaluation:**

1) CA125 2/1/16: elevated.

2) Abdomen and Pelvis CT Scan 2/1/16: Wide spread metastasis throughout peritoneal cavity. The largest lesions measuring 3-4cm’s. A large amount of diffuse ascites in the peritoneal cavity.

3) Chest CT Scan 2/1/16: Small pleural effusion on the left lung.

4) Paracentesis 2/5/16: 3.9 liters removed; Positive for malignant cells consistent with adenocarcinoma of ovarian primary.

5) Thoracentesis 2/5/16: Pleural fluid positive for malignant cells consistent with adenocarcinoma of the primary.

**Oncology Consult:**

2/10/16

This is a 75-year-old female with a recent diagnosis of widespread ovarian cancer. The patient has indicated that she does not wish to have any surgical intervention, but will consent to chemotherapy. The patient will receive six to seven months of chemotherapy with Carboplatin/Taxol;

4/5/16

Carboplatin/Taxotere started 2/26/16. Carboplatin was discontinued due an adverse reaction. The patient completed her treatment on Taxotere. The patient had an excellent response to chemotherapy. She will be reevaluated in three months.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| * **What is the primary site?**   **C56.9**   * **What is the histology?**   **8140/39** | | | | * **What is the grade/differentiation?**   **9** | | |
| **Stage/ Prognostic Factors** | | | | | | |
| Summary Stage | 7-Distant | |  | |  | |
| TNM Clin T | c3c | | TNM Path T | | Blank | |
| TNM Clin N | c0 | | TNM Path N | | Blank | |
| TNM Clin M | p1 | | TNM Path M | | p1 | |
| TNM Clin Stage | IV | | TNM Path Stage | | IV | |
| TNM Clin Descriptor | 0 | | TNM Path Descriptor | | 0 | |
| TNM Clin Staged By | 20 | | TNM Path Staged By | | 20 | |
|  |  | |  | |  | |
| Tumor Size Summary | 999 | | Mets at Dx - Bone | | 0 | |
| Regional Nodes Examined | 98 | | Mets at Dx - Brain | | 0 | |
| Regional Nodes Positive | 00 | | Mets at Dx - Liver | | 0 or 9 | |
| CS SSF 1 | 010 | | Mets at Dx - Lung | | 0 | |
| CS SSF 2 | 999 | | Mets at Dx - Other | | 0 | |
| CS SSF 3 | 998 | | Mets at Dx – Distant LN | | 0 | |
| **Treatment** | | | | | | |
| Diagnostic Staging Procedure | | 05 |  | | |  |
| **Surgery Codes** | |  | **Radiation Codes** | | |  |
| Surgical Procedure of Primary Site | | 00 | Radiation Treatment Volume | | | 00 |
| Scope of Regional Lymph Node Surgery | | 0 | Regional Treatment Modality | | | 00 |
| Surgical Procedure/ Other Site | | 0 | Regional Dose | | | 00000 |
| **Systemic Therapy Codes** | |  | Boost Treatment Modality | | | 00 |
| Chemotherapy | | 03 | Boost Dose | | | 00000 |
| Hormone Therapy | | 00 | Number of Treatments to Volume | | | 000 |
| Immunotherapy | | 00 | Reason No Radiation | | | 0 |
| Hematologic Transplant/Endocrine Procedure | | 00 | Radiation/Surgery Sequence | | | 0 |
| Systemic/Surgery Sequence | | 0 |  | | |  |

# Cancer case scenario 2

**Background:** 4/1/2016 The patient is a 60-year-old female who reported the new-onset of right breast edema after her initial ovarian cancer diagnosis. Although she had been previously followed for the right axillary lymphadenopathy, she had recently noticed an increase in erythema, thickness, and warmth of the skin of her right breast. She was treated with a 10-day course of antibiotics, with no change in symptoms.

**History:** The patientoriginally presented with pelvic discomfort in 01/15/2016. A pelvic ultrasound and CT scan of the abdomen and pelvis showed a complex ovarian mass; pap smear performed one month later was positive for atypical glandular cells suspicious for adenocarcinoma. Patient underwent a total abdominal hysterectomy with bilateral salpingoophorectomy, omentectomy, and periaortic lymphadenectomy 02/21/2016 (at your facility). Surgeons noted involvement of the omentum and appendix, as well as studding of the small bowel mesentery and right diaphragm, with tumors no more than 2 cm in size. All visible tumors were removed during intraoperative exam. Pathologic specimen showed extension of the tumor throughout the fallopian tubes, appendix, omentum, and 5 out of 5 positive lymph nodes. Final pathologic diagnosis of the tumor was papillary serous ovarian adenocarcinoma. Patient underwent placement of an intraperitoneal catheter and an intravenous Port-A-Cath for initiation of chemotherapy 03/11/2016.

Patient was evaluated for enrollment in a trial of Avastin and Tarceva, due to possibility of drug-resistant disease. CT scan of the chest, abdomen, and pelvis were ordered to obtain baseline data for the trial which revealed interval development of right axillary lymphadenopathy; largest lymph node was 1.1 x 1.8 cm and suspicion of a new primary breast cancer was raised. Breast magnetic resonance imaging (MRI) with gadolinium showed no suspicious lesions or masses and patient continued on Avastin and Tarceva until developing a significant rash in association with these drugs and required dose reduction.

Remainder of the patient's past medical history is noncontributory as she was previously in excellent health prior to the diagnosis of ovarian cancer. In addition, she had no known family history of ovarian or breast cancer.

**Investigations:**

Imaging 4/1/2016

* + U/S: ill-defined hypoechoic area in the right upper outer quadrant with multiple enlarged lymph nodes.
  + Mammogram:scattered fibroglandular densities and an area of architectural distortion with a few small punctate calcifications.
  + MRI: second bilateral breast MRI, confirmed the presence of an area of heterogeneous enhancement measuring 1 x 2 cm, highly suggestive of cancer, with areas suspicious for tumoral extension to the chest wall.

**Procedure:** fine-needle aspiration of the breast, showed cells consistent with adenocarcinoma.

**Pathology report:**

Punch biopsy of right breast

Multiple foci of high-grade adenocarcinoma with dermal lymphatic invasion, with morphology similar to that of the previous ovarian cancer.

Immunohistochemistry results: breast tissue specimen

CA-125: positive

Estrogen receptor (ER): negative

Progestin receptor (PR): negative

HER-2/neu oncoprotein: negative

**Treatment Plan:**

The patient will continue with her chemotherapy regimen. We will continue to monitor her metastasis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| * **What is the primary site?**   **C56.9**   * **What is the histology?**   **8460/3** | | | | * **What is the grade/differentiation?**   **9-Unknown** | | |
| **Stage/ Prognostic Factors** | | | | | | |
| Summary Stage | 7-Distant | |  | |  | |
| TNM Clin T | Blank | | TNM Path T | | p3b | |
| TNM Clin N | Blank | | TNM Path N | | p1 | |
| TNM Clin M | Blank | | TNM Path M | | c0 | |
| TNM Clin Stage | 99 | | TNM Path Stage | | IIIC | |
| TNM Clin Descriptor | 0 | | TNM Path Descriptor | | 0 | |
| TNM Clin Staged By | 20 | | TNM Path Staged By | | 20 | |
|  |  | |  | |  | |
| Tumor Size Summary | 999 | | Mets at Dx - Bone | | 0 | |
| Regional Nodes Examined | 05 | | Mets at Dx - Brain | | 0 | |
| Regional Nodes Positive | 05 | | Mets at Dx - Liver | | 0 | |
| CS SSF 1 | 999 | | Mets at Dx - Lung | | 0 | |
| CS SSF 2 | 999 | | Mets at Dx - Other | | 0 | |
| CS SSF 3 | 000 | | Mets at Dx – Distant LN | | 0 | |
| **Treatment** | | | | | | |
| Diagnostic Staging Procedure | | 00 |  | | |  |
| **Surgery Codes** | |  | **Radiation Codes** | | |  |
| Surgical Procedure of Primary Site | | 61 | Radiation Treatment Volume | | | 00 |
| Scope of Regional Lymph Node Surgery | | 5 | Regional Treatment Modality | | | 00 |
| Surgical Procedure/ Other Site | | 0 | Regional Dose | | | 00000 |
| **Systemic Therapy Codes** | |  | Boost Treatment Modality | | | 00 |
| Chemotherapy | | 02 | Boost Dose | | | 00000 |
| Hormone Therapy | | 00 | Number of Treatments to Volume | | | 000 |
| Immunotherapy | | 01 | Reason No Radiation | | | 1 |
| Hematologic Transplant/Endocrine Procedure | | 00 | Radiation/Surgery Sequence | | | 0 |
| Systemic/Surgery Sequence | | 3 |  | | |  |