Case Scenario 1

**History**

A 24 year old African American male presented with a chief complaint of left upper leg and knee pain for five months. The pain is worst at end of the day, no numbness/tingling distal extremity, no other concerns/complaints. Physical exam: gait is normal without assistive device, left knee no obvious deformity, no swelling/effusion, full range of motion with some moderate pain with flexion, some mid tenderness to palpation along medial distal femur and tibial plateau.

**Scans**

3/7/16 Left knee X-Ray: Aggressive osteo-sclerotic lesion distal femur most likely osteosarcoma, extension into surrounding soft tissue, no pathologic fracture

3/11/16 Bone Scan: Markedly abnormal signal uptake left femur involving most of shaft except for proximal one-third, distal shaft region uptake consistent with patient’s known mass surrounding involvement of distal left femur region

3/11/16 CT Chest: multiple pulmonary nodular densities most likely metastatic osteosarcoma

3/11/16 MRI Left Femur: large tumor, 11x9cm, distal femur intramedullary and extension soft tissue

**Operation**

3/16/16 Left femur bone and soft tissue biopsy

6/16/16 Left total femoral resection, endoprosthetic reconstruction: tumor virtually involve entire femur with large soft tissue mass in distal half of bone, prominent posterior soft tissue extension, no evidence gross tumor contamination, only evidence tumor within knee joint.

7/6/16 Left knee wound dehiscence

**Pathology**

3/16/16 Left femur bone and soft tissue biopsy: osteosarcoma, tumor extension into soft tissue, necrosis 40%, high grade (grade 3), LVI present

6/16/16 Left femur excision: osteosarcoma, fibroblastic type, 29.5x7x6.5cm, all margins negative, approximately 98% tumor necrosis, High grade (grade 3), LVI not identified, ypT2 NX

**Treatment**

3/24/16 Administration Doxirubicin, Cisplatin, MTX, Etoposide, IFOS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| * **What is the primary site?**   **C40.2, Femur**   * **What is the histology?**   **9182/3, Fibroblastic Osteosarcoma** | | | | * **What is the grade/differentiation?**   **4, high grade (grade 3)** | | |
| **Stage/ Prognostic Factors** | | | | | | |
| Summary Stage | 7 | | Tumor Size Summary | | 110 | |
| TNM Clin T | cT2 | | TNM Path T | | ypT2 | |
| TNM Clin N | cN0 | | TNM Path N | | cN0 | |
| TNM Clin M | cM1a | | TNM Path M | | cM1a | |
| TNM Clin Stage | 4A | | TNM Path Stage | | 4A | |
| TNM Clin Descriptor | 0 | | TNM Path Descriptor | | 4 | |
| TNM Clin Staged By | 20 | | TNM Path Staged By | | 20 | |
| CS SSF 3 | 098 | |  | |  | |
|  |  | | Regional Nodes Positive | | 98 | |
|  |  | | Regional Nodes Examined | | 00 | |
|  |  | | Mets at Dx - Bone | | 0 | |
|  |  | | Mets at Dx - Brain | | 0 | |
|  |  | | Mets at Dx - Liver | | 0 | |
|  |  | | Mets at Dx - Lung | | 1 | |
|  |  | | Mets at Dx - Other | | 0 | |
|  |  | | Mets at Dx – Distant LN | | 0 | |
|  |  | |  | |  | |
| **Treatment** | | | | | | |
| Diagnostic Staging Procedure | | 02 |  | | |  |
| **Surgery Codes** | |  | **Radiation Codes** | | |  |
| Surgical Procedure of Primary Site | | 30 | 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 | | | 1 |
| Hematologic Transplant/Endocrine Procedure | | 00 | Radiation/Surgery Sequence | | | 0 |
| Systemic/Surgery Sequence | | 2 |  | | |  |

Case Scenario 2

**History**

An 82 year old male presents with complaints of blood in stool and coffee ground emesis. Patient states he was extremely weak, reports vomiting blood this morning. Has been having moderate reflux over the past month or more, and he is concerned that he may have an ulcer that is bleeding.

**Scopes**

EGD: Body/Corpus stomach with erythema but no obvious masses. Colonoscopy: polyp in the rectosigmoid, polypectomy performed.

**Scans**

CT Abdomen/Pelvis: 5.6cm soft tissue density that is lobulated along the lesser curvature of the proximal stomach consistent with biopsy confirmed GIST is also seen.

Chest X-Ray: Acute, relatively severe pulmonary edema. Pneumonia not excluded.

**Operation**

Partial gastrectomy: Abdominal exploration revealed no evidence of ascites. Liver appeared normal in size, shape and contour. Stomach revealed approximately 5-6cm exophytic neoplasm taking origin from lesser curvature of stomach. Neoplasm was soft and not adherent to surround structures. No regional pathologic lymphadenopathy evident. Spleen not enlarged.

**Pathology**

Body/Corpus stomach, biopsy: mild chronic gastritis with mucosal erosion. Negative for H. Pylori (by immunostain), negative for intestinal metaplasia, dysplasia and malignancy. See comment. Rectosigmoid, polypectomy: Tubular adenoma, negative for high grade dysplasia. **Comment**: upon review of slide there is a 1.6mm nodule amidst mildly inflamed gastric mucosa with erosion. This area demonstrates interlacing spindle cells raising possibility of GIST tumor. Due to this clinical concern, gross presentation endoscopically and microscopic appearance special stains were performed include CD34, CD117, Desmin and Vimentin. Staining pattern consistent with GIST tumor, KIT (CD117) positive.

Partial Gastrectomy: GIST, intermediate risk, malignant. Single tumor, 6cm, margins negative for tumor, three benign lymph nodes (0/3), and mitotic rate: 9/50HPF

**Treatment**

Med-Oncology Consult: Given that patient has an intermediate risk GIST with tumor size 6cm, I would recommend adjuvant Imatinib for three years per National guidelines. We discussed the potential risks of this therapy and he is interested in pursuing that. I would like for him to recover first and go home and then will arrange follow-up visit in the office and at that time discuss details of treatment and start Gleevec.

Med-Oncology Follow-up Visit: After extensive discussion, the patient elected to pursue surveillance now without any Gleevec.

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| * **What is the primary site?**   **C16.5, lesser curvature stomach**   * **What is the histology?**   **8936/3 GIST, malignant** | | | | * **What is the grade/differentiation?**   **9** | | |
| **Stage/ Prognostic Factors** | | | | | | |
| Summary Stage | 1 | | Tumor Size Summary | | 060 | |
| TNM Clin T | cT3 | | TNM Path T | | pT3 | |
| TNM Clin N | cN0 | | TNM Path N | | cN0 | |
| TNM Clin M | cM0 | | TNM Path M | | cM0 | |
| TNM Clin Stage | 99 | | TNM Path Stage | | 1B | |
| TNM Clin Descriptor | 0 | | TNM Path Descriptor | | 0 | |
| TNM Clin Staged By | 20 | | TNM Path Staged By | | 20 | |
| CS SSF 1 | 988 | |  | |  | |
| CS SSF 6 | 090 | | Regional Nodes Positive | | 00 | |
| CS SSF 7 | 988 | | Regional Nodes Examined | | 03 | |
| CS SSF 8 | 988 | | Mets at Dx - Bone | | 0 | |
| CS SSF 9 | 988 | | Mets at Dx - Brain | | 0 | |
| CS SSF 10 | 988 | | Mets at Dx - Liver | | 0 | |
|  |  | | Mets at Dx - Lung | | 0 | |
|  |  | | Mets at Dx - Other | | 0 | |
|  |  | | Mets at Dx – Distant LN | | 0 | |
|  |  | |  | |  | |
| **Treatment** | | | | | | |
| Diagnostic Staging Procedure | | 02 |  | | |  |
| **Surgery Codes** | |  | **Radiation Codes** | | |  |
| Surgical Procedure of Primary Site | | 30 | Radiation Treatment Volume | | | 00 |
| Scope of Regional Lymph Node Surgery | | 4 | Regional Treatment Modality | | | 00 |
| Surgical Procedure/ Other Site | | 0 | Regional Dose | | | 00000 |
| **Systemic Therapy Codes** | |  | Boost Treatment Modality | | | 00 |
| Chemotherapy | | 87 | Boost Dose | | | 00000 |
| Hormone Therapy | | 00 | Number of Treatments to Volume | | | 00 |
| Immunotherapy | | 00 | Reason No Radiation | | | 1 |
| Hematologic Transplant/Endocrine Procedure | | 00 | Radiation/Surgery Sequence | | | 0 |
| Systemic/Surgery Sequence | | 0 |  | | |  |