Abstracting Upper GI Cancer Incidence and Treatment Data
Quiz 1
Multiple Primary and Histologies

Case 1

A 74 year old male with a history of GERD presents complaining of dysphagia. An esophagogastroduodenoscopy was performed and the patient was found to have a lesion in the distal esophagus. The tumor epicenter appears to be in the mid distal esophagus with extension to gastroesophageal junction. The remainder of the exam was negative. The lesion was biopsied and tissue was sent for review.

Final Pathology:

Invasive mucinous adenocarcinoma, signet ring cell type.

1. How many primaries are present in case 1?
    a. One
    b. Two
    c. Three
    d. Four
2. Which rule did you use to determine the number of primaries (Circle all that apply)?
    a. M2
    b. M7
    c. M11
    d. M12
3. Which histology rule would be used (if more than one primary circle each applicable rule)?
    a. H11
    b. H13
    c. H16
    d. H17
4. Which histology would be assigned (if more than one primary circle each applicable histology)?
    a. Adenocarcinoma 8140/3
    b. Mucinous Adenocarcinoma 8480/3
    c. Signet Ring Cell Carcinoma 8490/3
    d. Adenocarcinoma with mixed subtypes 8255/3
5. What is coded for the data item "Multiplicity Counter" (if more than one primary circle each applicable code)?
    a. 01
    b. 02
    c. 03
    d. 99
6. What is code for the data item "Type of Multiple Tumors Reported as One Primary" (if more than one primary circle each applicable code)?
    a. 00
    b. 02
    c. 40
    d. 99

Case 2

A 45 year old female presented with newly diagnosed tumors in the esophagus and thyroid. A cervical esophagectomy, total laryngectomy, total thyroidectomy and reconstruction by free jejunal graft were performed.

Final Pathology:

- Esophagus: 6.2 × 4.0 cm as poorly-differentiated squamous cell carcinoma was found in the cervical esophagus.
- Thyroid: 1cm papillary carcinoma was identified in the right lobe. An additional .8cm focus of follicular carcinoma was identified in the left lobe.
- Lymph node metastases from esophageal carcinoma was detected in 3/5 periesophageal lymph nodes.

7. How many primaries are present in case 2?
    a. One
    b. Two
    c. Three
    d. Four
8. Which rule(s) would be used to determine the number of primaries (circle all that apply)?
    a. M2
    b. M6
    c. M11
    d. M17
9. Which rule(s) would be used to determine the histology (if more than one primary circle each applicable rule)?
    a. H11
    b. H15
    c. H26
    d. H27
10. What histology (ies) would be assigned (if more than one primary circle each applicable histology)?
    a. Squamous cell carcinoma 8070/3
    b. Papillary Carcinoma 8260/3
    c. Follicular Carcinoma 8330/3
    d. Papillary carcinoma, follicular variant 8340/3
11. What is coded for the data item "Multiplicity Counter" (if more than one primary circle each applicable code)?
    a. 01
    b. 02
    c. 03
    d. 99
12. What is coded for the data item "Type of Multiple Tumors Reported as One Primary" (if more than one primary circle each applicable code)?
    a. 00
    b. 02
    c. 40
    d. 99

Case 3
A 71-year-old man presented with nausea, vomiting, worsening abdominal pain over the previous two months, and weight loss of 15 pounds in the previous 15 days. Laboratory findings were unremarkable.

Esophagogastroduodenoscopy with biopsy demonstrated a mass located on the antrum, proximal to the pylorus.

Histological examination of the endoscopic biopsy revealed a poorly differentiated adenocarcinoma, and total gastrectomy was performed. During surgery, a well-circumscribed nodular gray-white lesion, measuring 0.5 cm and located on the subserosa of the proximal fundus, was seen, which had no connection with the adenocarcinoma.

Pathology:
Macroscopic examination of the total gastrectomy identified an ulcerovegetative tumor 5.7x4.2x1.5 cm in diameter located on the lesser curvature of the antrum.

Final Diagnosis:
- Tumor of the antrum: Poorly differentiated adenocarcinoma with focal extracellular mucin production. Serosa was infiltrated, and metastatic lymph nodules were present in both lesser and greater curvatures.
- Subserosal solid nodular lesion from the fundus: Intramural stromal tumor consisting of spindle cells without any pleomorphism, atypia, mitosis or necrosis. Findings are consistent with gastrointestinal stromal tumor (GIST).

13. How many primaries are present in case 1 (circle all that apply)?
    a. One
    b. Two
    c. Three
    d. Four
14. Which rule would be used to determine the number of primaries (circle all that apply)?
    a. M2
    b. M7
    c. M11
    d. M12
15. Which histology rule would be used to determine the histology (if more than one primary circle each applicable rule)?
    a. H11
    b. H13
    c. H16
    d. H17
16. Which histology would be used to code this case (if more than one primary circle each applicable histology)?
    a. Adenocarcinoma 8140/3
    b. Mucin-Producing Adenocarcinoma 8481/3
    c. Malignant GIST 8936/3
    d. Adenocarcinoma with mixed subtypes 8255/3

Abstracting Upper GI Cancer Incidence and Treatment Data
Quiz 2
Collaborative Stage and Treatment

Case 1

H&P

A 53-year-old male was referred for further examination of X-ray abnormalities including elevated lesion in the esophagus. On admission no specific clinical findings were noted. There were no abnormal findings in laboratory data.

Endoscopy revealed a 3x3 cm elevated lesion 31–34 cm from the incisor teeth, at the left-anterior wall of the middle esophagus. Three additional lesions were detected 27 and 29 cm from the incisor teeth and were suspected to be intramural metastases. Specimens taken from the tumor revealed poorly differentiated squamous cell carcinoma.

Radiological examination of the upper gastrointestinal tract showed an elevated lesion, measuring 3.0 x 2.4 cm, with uneven surface and distinct margins. Another smaller elevation was detected in its proximal region.

Cervical and chest computed tomography (CT) images showed enlarge paraesophageal lymph nodes, paratracheal lymph nodes, tracheobronchial lymph nodes and bifurcational lymph nodes. These appear to be metastatic.

Operative Report:

Thoracotomy: The tumor was located mainly at the middle esophagus and direct invasion of the surrounding tissue could not be identified. Metastases into multiple lymph nodes, including paratracheal lymph nodes and parapharyngeal lymph nodes were suspected. Accordingly, subtotal esophagectomy with lymph node dissection was performed as well as reconstruction with a gastric tube via the retromediastinal route.

Pathology:

The tumor was 3.5 x 2.6 cm in diameter and invaded into the surrounding adventitia. Margins were negative. Three smaller intramural metastatic lesions were also identified. These were confined to the mucosa.

Histopathologic examination showed a poorly differentiated squamous cell carcinoma.

One of two right deep cervical esophageal lymph nodes, one of two right supraclavicular lymph nodes, four of four upper paraesophageal lymph nodes, two of two left tracheobronchial lymph nodes and two of six paratracheal lymph nodes were positive for malignancy. Tumor cells were found in the lymphatic vessels near the metastatic lymph nodes and intramural metastatic lesions.

Adjuvant Treatment:
Four weeks after surgery, the patient was treated with a course of 5-FU at 1000 mg/day on days 1–3, together with CDDP at 50 mg/day on day 1 and MTX at 30 mg/day on day 1, and received the same course 2 weeks later.

From the 67th postoperative day, he received radiotherapy for bilateral supraclavicular and superior mediastinal nodes (field size 21 x 20 cm, 10 MV X-rays, 2 Gy/fr, 5 fr/week), a total dose of radiotherapy of 46 Gy. After this therapy, mild □eucopenia falling to 3200/μl and mild anorexia developed but no serious side effects were observed.

After discharge, the patient was treated with a course of 5-FU at 500 mg/day on days 1 and 2, together with CDDP at 20 mg/day on day 1. This combination chemotherapy was continued further with close follow-up examinations and such treatment was repeated every 3–4 months without any severe adverse effects.

1. What is CS Extension?
    a. 20
    b. 30
    c. 40
    d. 60
2. What is CS TS/Ext Eval?
    a. 0
    b. 1
    c. 3
    d. 9
3. What is CS Lymph Nodes?
    a. 10
    b. 20
    c. 30
    d. 50
4. What is CS LN Eval?
    a. 0
    b. 1
    c. 3
    d. 9
5. What is Surgical Procedure Primary Site?
    a. 30
    b. 40
    c. 50
    d. 53
6. What is Scope Regional Lymph Node Surgery?
    a. 3
    b. 4
    c. 5
    d. 9

7. What is Radiation Regional Modality?
    a. 20
    b. 24
    c. 31
    d. 40
8. What is Radiation Boost Modality?
    a. 00
    b. 24
    c. 31
    d. 40
9. What is Chemotherapy?
    a. 00
    b. 01
    c. 02
    d. 03
10. What is Hormone Therapy?
    a. 00
    b. 01
    c. 87
    d. 99
11. What is Immunotherapy?
    a. 00
    b. 01
    c. 87
    d. 99
12. What is Systemic/Surgery Sequence?
    a. 0
    b. 2
    c. 3
    d. 4

Case 2

H&P

A 48-year-old man presented with a chief complaint of epigastric discomfort. On physical examination, the abdomen was soft and flat with neither palpable mass nor tenderness. No peripheral lymphadenopathy was observed. Endoscopic examination revealed a protruding lesion 1.5 cm in diameter with a well defined margin on the anterior wall of the gastric antrum. A biopsy sample taken from the lesion was not diagnosed histologically as malignant.

Double-contrast radiography showed a tumor mass 2.0 cm in diameter with a well defined border on the greater curvature of the gastric antrum. CT demonstrated a tumor mass with a distinct border on the anterior wall of the stomach. Abdominal ultrasonography (US) showed a hypoechoic tumor measuring 3.0 × 2.0 cm with an irregular margin under the gastric mucosa. CT and US showed no findings suggestive of lymph node or liver metastasis. Laboratory examination revealed an elevated CA19-9 level of 106.9 U/ml; the level of carcinoembryonic antigen (CEA) was within normal limits.

Although a histological diagnosis was not achieved before surgery, a laparoscopic subtotal distal gastrectomy with regional lymph node dissection was performed after obtaining informed consent from the patient, since gastric cancer was highly suspected in view of the markedly elevated level of CA19-9 and the irregular tumor margin demonstrated by US.

Pathology:

Final Diagnosis:

A protuberant tumor 2.0 cm in diameter was observed on the anterior wall of the gastric antrum. The tumor surface was covered with apparently normal mucosa which was reddish in comparison with the surrounding mucosa. The recess found on endoscopic examination was unremarkable. The tumor was apparent on the serosa of the stomach.

The histological diagnosis was papillo-tubular adenocarcinoma infiltrating the serosa. Papillo-tubular adenocarcinoma with a reticulated gland structure was found in the lamina propria mucosae, while less differentiated adenocarcinoma with abundant edematous fibrosis was observed in the submucosal layer. Lymphatic and vascular vessel infiltration was remarkable, 2 of 26 perigastric lymph nodes.

The patient was discharged in the second postoperative week without complication. No recurrence has been observed during a follow-up period of 1 year and 6 months after the operation.

13. What is CS Extension?
    a. 40
    b. 45
    c. 50
    d. 55
14. What is CS LN's?
    a. 00
    b. 10
    c. 40
    d. 60
15. What is CS LN Eval?
    a. 0
    b. 1
    c. 3
    d. 9
16. What is CS Mets?
    a. 00
    b. 10
    c. 40
    d. 50
17. What is SSF 1?
    a. 000
    b. 001
    c. 002
    d. 400
18. What is Surgical Procedure Primary Site?
    a. 30
    b. 32
    c. 40
    d. 42
19. What is Scope Regional Lymph Node Surgery?
    a. 3
    b. 4
    c. 5
    d. 9
20. What is Surgical Procedure/Other Site?
    a. 0
    b. 1
    c. 2
    d. 4