EXERCISE 1

History

The patient is a 37-year-old Asian male who was in his usual state of good health until recently. He has been experiencing severe headaches and mild seizures over the last two months or so. A recent CT scan of the brain showed a 3.5x1.8cm enhancing left hemisphere mass with significant surrounding edema.

Imaging:

6/12/2010 CT of the brain: 3.5 x 1.8 cm enhancing left hemisphere mass with significant surrounding edema.

CT of the chest, abdomen, and pelvis: no abnormalities detected.

6/17/2010 MRI brain and brain stem: There is a 3.5 x 1.6 x 1cm mass in the posterior third of the left temporal lobe. There is significant surrounding edema involving much of the left temporal lobe and hemisphere. The size and configuration of the ventricular system is within normal limits. Right hemispheric cortical sulci as well as central subarachnoid cisterns are symmetric and unremarkable. No additional lesions are noted.

IMPRESSION: Left posterior temporal lobe lesion. Primary considerations would be for primary or metastatic brain tumor.

Procedures:

6/22/2010-Craniotomy and removal of all visible tumor.

Pathology:

Gross Examination:

Specimen received, labeled "left temporal tumor" consists of multiple irregular fragments of tan to white tissue, measuring in aggregate 3.5 x1.2 x 1 cm. Several fragments have a hemorrhagic appearance.

Microscopic Examination:

Sections contain a mildly cellular infiltrative glial neoplasm with formation of prominent perineuronal, perivascular and subpial secondary structures. Many cells have astrocytic differentiation with obvious eosinophilic cytoplasm and elongated vesicular nuclei.

Final Report:

Gemistocytic astrocytoma, (WHO Grade II)

Addendum:

RT-PCR testing for O6-methylguanine-methyltransferase (MGMT) indicated the tumor was unmethylated.

Ki-67 testing indicated a growth fraction LI at 9.7%

Radiation Oncology:

37 year-old male with a new diagnosis of Gemistocytic astrocytoma, WHO grade II. Karnofsky Performance Score is estimated at 90. We recommend postoperative IMRT external beam radiation therapy.

DATE TREATMENT STARTED: 10/18

DATE TREATMENT ENDED: 12/8

FIELD NAME	CODE	RATIONALE/DOCUMENTATION
Patient Name		
Sequence		
Primary Site		
Histology		
Behavior		
Grade		
Grade system type		
Grade system value		
Lymph-vascular invasion		
CS Mets at Dx - Bone		
CS Mets at Dx - Lung		
CS Mets at Dx - Liver		
CS Mets at DX - Brain		
CS Tumor Size		
CS Extension		
CS Tumor Size/Ext Eval		
CS Lymph Nodes		
CS Lymph Nodes Eval		
Regional Nodes Positive		
Regional Nodes Examined		

CS Mets at Dx

CS Mets Eval

CS Site-Specific Factor 1

CS Site-Specific Factor 2

CS Site-Specific Factor 3

CS Site-Specific Factor 4

CS Site-Specific Factor 5

CS Site Specific Factor 6

CS Site Specific Factor 7

CS Site Specific Factor 8

Surgery of Primary Site

Scope of Regional Lymph Node Surgery

Radiation-Regional Treatment Modality

Chemotherapy

Immunotherapy

EXERCISE 2

History

1/11/2011 The patient is a 40-year-old-male with neurologic symptoms that are affecting his activities of daily living. According to his wife he has had personality changes as well as clumsiness resulting in numerous minor falls. He reports that he is currently on a leave of absence from work due to these symptoms that have made him unable to perform his job. His neurologic status was analyzed, and Karnofsky performance status is 70.

Imaging:

1/11/2011 CT scan of the brain: Enhancement in the right frontal lobe with significant edema. No other lesions are noted, and other structures appear normal.

Procedures:

1/18/2011 Right supra-orbital craniotomy with brain tumor resection: Right frontal mass involving less than half of the lobe was removed, but residual tumor was visible.

Pathology:

Gross Examination:

3.1 x 2.9 x 2.1 cm right frontal lobe mass.

Microscopic Examination:

Malignant glial tumor infiltrates the leptomeninges and the dura. The tumor contains both astrocytic and oligodendroglial differentiation. Also seen are areas of necrosis, vascular proliferation, and calcification.

Final Diagnosis:

Right frontal lobe mass with oligodendroglioma and astrocytoma; WHO grade III.

Genetic Testing:

1/20/2011 Loss of heterozygosity: 1p/19q fragment analysis

1p assay positive for gene deletion

19q assay positive for gene deletion

Radiation Oncology:

2/3/2011 40 year-old male with a new diagnosis of mixed glioma, WHO grade III. Patient started treatment today with procarbazine and vincristine.

FIELD NAME	CODE	RATIONALE/DOCUMENTATION
Patient Name		
Sequence		
Primary Site		
Histology		
Behavior		
Grade		
Grade system type		
Grade system value		
Lymph-vascular invasion		
CS Mets at Dx - Bone		
CS Mets at Dx - Lung		
CS Mets at Dx - Liver		
CS Mets at DX - Brain		
CS Tumor Size		
CS Extension		
CS Tumor Size/Ext Eval		
CS Lymph Nodes		
CS Lymph Nodes Eval		
Regional Nodes Positive		
Regional Nodes Examined		

CS Mets at Dx

CS Mets Eval

CS Site-Specific Factor 1

CS Site-Specific Factor 2

CS Site-Specific Factor 3

CS Site-Specific Factor 4

CS Site-Specific Factor 5

CS Site Specific Factor 6

CS Site Specific Factor 7

CS Site Specific Factor 8

Surgery of Primary Site

Scope of Regional Lymph Node Surgery

Radiation-Regional Treatment Modality

Chemotherapy

Immunotherapy