CNS Take Home Quiz *Answers*

Please use your 2007 MP/H manual to complete to following case exercises.

## Case 1

* Facility A: 8/31/16 MRI spine
  + Most likely a nerve sheath tumor Left of T5 & 6 neural foraminal mass
  + Most likely additional nerve sheath tumor 20 MM anterolateral aspect of T6 vertebral body
  + Likely nerve sheath tumor T4 neural foramen
* Impression: Thoracic schwannoma with myelopathy
* Facility B
  + 10/1/16 CT Thoracic spine: Intradural and extradural neurogenic tumor at the T5-6 level on the left corresponds with outside MRI of 8/31/16
  + 10/2/16 MR Brain: Impression: Left fifth nerve and cochlear schwannoma consistent with neurofibromatosis type II.
  + 10/2/16 MR CT Lumbar Spine Impression: Multiple neurogenic tumors. Only lesion likely to be symptomatic is at T5-T6 having both intradural and extradural components and compressing the cord. The appearance is consistent with schwannoma. Multiple tiny enhancing intradural nodules in the lumbar spinal canal extending from T12-L1 to the level of L4-L5 interspace most likely secondary to neurogenic tumors
  + **Treatment** 
    - Watchful waiting for left cochlear schwannoma and left trigeminal schwannoma
    - Surgical resection of T5 lesion
  + **Pathology from T5 resection:** Schwannoma

**How many reportable primaries are present?**

3

**Which site/histology combinations are reported?**

1. Spinal cord C720 schwannoma M9560/0, dx 8/31/16.
2. Cranial nerve C725 M9560/0, dx 10/2/16
3. Acoustic nerve C724, schwannoma M9560/0, dx 10/2/16

**Rationale:** primary sites have ICD-O-3 topography code is differ at the 2nd, 3rd and/or 4th character)

M4 Tumors with ICD-O-3 topography codes that are different at the second (C**x**xx) and/or third characters (Cx**x**x), or fourth (Cxx**x**) are multiple primaries. \*

## Case 2

A 66 year old white male presents with a current diagnosis of anaplastic meningioma post resection of a right sphenoid wing tumor. The medical record documents a history of a complex right sphenoid wing tumorpartially resected and treated with radiation 50 years ago. He is not certain exactly what type of neoplasm was resected. There is no information about surveillance over the past 50 years.

**Is this is a new primary?**

Yes

**Which MP/H rules did you use to determine this?**

M3

This is a new primary

**Rationale: The tumor has transformed from borderline to malignant behavior. See Rule M:3 An invasive brain tumor (/3) and either a benign brain tumor (/0) or an uncertain/borderline brain tumor (/1) are always multiple primaries**

The current neoplasm is an anaplastic meningioma 9530/3. First course treatment for the original tumor was partial resection followed by radiation therapy. Although there are no time limits for benign and borderline tumors, the patient had been asymptomatic for over 50 years, so it would be unusual for this to be a malignant transformation of the same tumor.

## Case 3

An MRI showed multiple intracranial stigmata of NF1 (cerebellar hemispheres bilaterally, brainstem, cerebral peduncles), bilateral optic pathway glioma, and a hypothalamic glioma. Also noted was a large intradural neurofibroma with compression of the cauda equina at L3-L4. The neurofibroma of L3-L4 was removed. Pathology from the resected specimen showed neurofibroma.   
  
**How many primaries?**

2 primaries

* Neurofibroma (9540/0) M2 H2
* Glioma (9380/3) M10

**Which MP/H rules did you use to determine this?**

Stigmata seen on scans are "bright spots" that cannot be interpreted as tumor or masses. Stigmata would not be accessioned. The SINQ questions will be revised with new answers.

## Case 4

A patient had an MRI of the brain and spinal cord and was found to have the following:

1. Posterior parasagittal meningioma
2. Right frontal convexity meningioma
3. Posterior falx meningioma
4. Olfactory meningioma
5. Right sphenoid wing meningioma
6. Right frontal parasagittal meningioma.
7. Bilateral vestibular Schwannomas.

**How many primaries are present and what histology and site codes would be assigned to each primary.**

**Answer**

Two primaries

Multiple meningiomas coded to cerebral meninges C700

Bilateral vestibular schwannomas, also called bilateral acoustic neuromas, single primary coded to the acoustic nerve.

## Case 5

In August of 2012 a patient was found to have a brain lesion and had a partial dissection. Pathology from the procedure showed grade II astrocytoma. There was no radiation therapy after the partial resection. That patient returned in 2012 with a “recurrence”. A biopsy of the “recurrent tumor” showed dedifferentiated glioblastoma multiforme.

**How many primaries?**

1 primary

**Which MP/H rules did you use to determine this?**

Rule M6

**Answer**

Same Primary/recurrence

Rule M6, the GBM following an astrocytoma is a single primary. This is a recurrence.