**Additional part:**

CT Head or Brain W/O Contrast (11/28 11:46)

Findings: There is large low attenuation mass within the left thalamic and basal ganglia region which measures 3.7 cm anteroposterior diameter by 3.6 cm transverse diameter by 3.9 cm craniocaudal diameter. Adjacent vasogenic edema. Mass effect on the third ventricle with approximately 7 mm midline shift towards the right . Finding consistent with malignancy primary versus metastatic. Other etiologies not excluded. There is no hemorrhage. Mild to moderate ischemic leukoencephalomalacia. Lateral ventricles and cortical sulci are within normal limits for patient's age and some central volume loss. CONCLUSION: **Left thalamic and left basal ganglia low-attenuation mass consistent with malignancy primary versus metastatic as described. Mass effect on the third ventricle with midline shift towards the right as described.**

Initial Assessment:

Patient presents with newly diagnosed hypodense intracranial lesion in right subcortical region of thalamus concerning for mass. Patient presented with new onset of near daily intermittent headaches likely 2/2 to lesion for past 3 months. Lesion appears cystic, well circumscribed with perilesional edema and mass effect. MRI brain w/wo GAD for further lesion definition. Patient has positive metastatic risk factor of his long term history of smoking. Patient currently has no obvious focal, lateralizing neurological deficit and mentation is intact. Patient currently also denies any significant symptom including HA, dizziness, vertigo, hearing or vision problems, gait or speech disturbance, weakness or sensory impairment. Patient started on decadron for antiedema therapy and AEDs for seizure prophylaxis Will continue to monitor closely. Will continue to follow up with neurosurgery recommendations, especially concerning possible surgical intervention. GCS 15mrs 0

1. Left thalamic and left basal ganglia mass consistent with malignancy versus possibility of metastatic disease

**Interval Follow up:**

Overnight, no acute events. No seizures, no focal or lateralizing deficits.

Patient seen and examined at bedside in NCCU. Patient found awake, alert in no acute distress. He denies any symptoms at this time including no dizziness or HA. . Exam remains nonfocal, nonlateralizing. No seizures, no new or worsening deficits, no fluctuating or abrupt decline in mentation.

Radiology **MRI Brain WO/W Contrast (**11/29 12:20)

Diffusion-weighted images show no restricted diffusion to suggest acute ischemia.

No evidence of acute intracranial hemorrhage.

There is a mass in the left thalamus and basal ganglia region which appears rounded with thick rim of peripheral enhancement as well as internal septal and amorphous areas of enhancement within the mass. This measures approximately 3.9 x 3.8 x 3.7 cm. The central portions of the mass show heterogeneous hyperintense T2 signal suggesting internal complex cystic or necrotic components.

There is surrounding vasogenic edema surrounding the mass in the left basal ganglia, left frontoparietal and temporal lobe regions as well as inferiorly in the left midbrain region. No other definite enhancing masses are identified.

There is approximately 7 mm of left-to-right subfalcine shift, grossly unchanged as previous exam.

IMPRESSION:

**Single thick walled peripherally enhancing mass with areas of internal enhancement in the left basal ganglia and thalamus. There is significant surrounding vasogenic edema with mass effect upon the brain structures and left-to-right subfalcine shift.**

**Differential considerations for this finding are broad. Findings are concerning for primary or metastatic malignancy, however other etiologies including abscess/infection, lymphoma, or other etiologies would present a similar appearance and cannot be excluded.**

**No acute ischemia. No acute hemorrhage.**

Assessment:

Brain MRI w/wo shows well circumscribed mass with ring enhancement to thalamus-basalganglia region, significant perilesional edema and mass effect including ventricle. Based on neuroimaging, mass is concerning for high grade glioma(astrocytoma) vs metastases. Clinical history taking does not favor infection (abscess) given no history of fevers, seizures, or other signs of infection. Patient presented with new onset of near daily intermittent headaches likely 2/2 to lesion for past 3 months. Patient has positive metastatic risk factor of his long term history of smoking. AEDs for seizure prophylaxis. Decadron per NSGY. Will continue to monitor closely. As per neurosurgery, tentatively will undergo surgical intervention with biopsy for better case definition.

CT of the brain. 12/1 after biopsy

IMPRESSION: Status post surgical procedure of the previously described low density mass in the topography of the thalamus. Air within the mass is present as well as in the left frontal horn and left frontal subdural space.

Minimal decrease midline shift to the right with minimal decrease mass effect upon the third ventricle. No definite evidence of intracerebral.

Individualized dose optimization techniques were used for this CT.

IMPRESSION: Minimal decrease in amount of air within the left thalamic lesion. No other significant change

- s/p biopsy of mass on 12/1/20--- pending pathology results **(see glioma report picture I sent)**

CT Chest W/ Contrast to rule out malignancy/mets

CONCLUSION: No acute findings.

CT abdomen and pelvis with IV contrast only: 12/2/2020 10:54 AM.

Conclusion: No other mass lesion identified. No periaortic adenopathy. No small bowel obstruction.

**No malignancy or metastasis on both CT chest and CT Abd.**

**d/c, follow up with Dr Diaz-Rangel s outpatient- gamma knife radiosurgery, chemotherapy, and targeted molecular therapy with Bevacizumab.**