Lung Case # 6

HISTORY AND PHYSICAL

Date 11/04/2010

History or Present Illness: This lady has a long significant history of smoking from early teenage. For over one year has had increasing cough and sputum. She is recently presented to hospital with collapse of her right lung. She was transferred by air ambulance to ICU, where she has remained in the ICU since her arrival. CT scan on admission showed a right mainstem bronchus soft tissue mass in the right hilum. Mediastinal lymph node enlargement as well. CT of the head showed no sign of cerebral mets.

Past Medical History: Her past medical history includes a motor vehicle accident in early childhood which involved a head injury from which she took several days to regain consciousness – very little detail is available on that incident. At some point in the recent past, she has also had a hysterectomy.

RADIATION ONCOLOGY CONSULT # 1

Date: 11/04/2010

Diagnosis: Undifferentiated large cell carcinoma right main stem bronchus.

Reason: The patient has been referred to Dr.XX services for consideration of radiation therapy.

Assessment: This lady was referred to Radiation Oncology for consideration of radiotherapy for her right lung mass. She hopefully will be able to receive four to five treatments of radiotherapy as soon as the patient is able to co-operate for that same treatment. The treatment plan has been discussed with family and they are aware of her guarded prognosis.

RADIATION ONCOLOGY CONSULT # 2

Date: 11/15/2010

This 53 year old married women with locally advanced carcinoma of the right lung, non-small cell type, is referred to Dr. XX for consideration of radiation treatment.

I should also mention that Dr. XX was also involved in assessment of this unfortunate patient. She basically presented with respiratory symptoms and weight loss. She was admitted to the hospital and then was transferred by Air Ambulance to Dr. XX under the respiratory services. Because of her severe respiratory distress, she was admitted to the ICU. She has had a bronchoscopy done by Dr. XX, which shows an endobronchial tumor in the right main stem bronchus. Chest X-ray showed opacification of the right lung in keeping with volume loss. CT scan of the thorax on 10/30/2010 showed there is a 2-3 cm mass in the region of the right main stem bronchus just beyond the level of the carina causing a significant amount of atelectasis of the right lower lobe. Just distal to the bronchial mass, there is the impression of a larger 4-5 cm mass. According to the radiologist there is evidence of right paratracheal adenopathy and also a

small right-sided pleural effusion. Biopsy from the right main stem bronchus lesion shows a non-small cell lung carcinoma. There does not appear to be any evidence of spread elsewhere on clinical assessment and history at the moment. In addition to communicating with the doctors we also spoke to the family concerning her past, there is nothing in the past that would contraindicate the use of radiation. We will treat her palliatively and hopefully at least improve her well enough and get her back for further care. The family understands the grave prognosis and has also signed consent on her behalf for radiation treatments. Of course we have also spoken to her as well but because of her performance status, we were afraid she might not understand everything about the treatments and hence we got the family to sign.

RADIATION ONCOLOGY PROGRESS NOTES

Date: 12/03/2010

This woman with non-small cell carcinoma of the right lung received a palliative course of 7 MV photon radiation of 2997 cGy in 9 fractions uneventfully. Towards the end of the radiation treatment, there was significant improvement in her respiratory status. Respiratory Services who have been looking after her during her investigative treatment will be transferring her back to the hospital for further care in the near future.

RADIOLOGY REPORT # 1
CT Head, Chest and Abdomen with IV contrast

Date: 10/28/2010

Head: Enhanced CT images of the head are obscured by motion artifact, as the patient was quite agitated. There is mild cerebral atrophy. There are no enhancing lesions. There is no sign of hemorrhage. I do not detect any metastases to the calvarium.

Chest and Abdomen: There is complete collapse of the right lung caused by a soft tissue mass in the right mainstem bronchus just beyond the carina. This should be easily amenable to sampling with bronchoscopy. There is shift of the mediastinum to the right in keeping with this collapse. There is a very small amount of pleural fluid on the right. The left lung is clear. The right hemidiaphragm is elevated. Only a portion of the abdomen could be imaged because of the patient's agitation. I cannot comment on the abdomen because of this. The patient will need a repeat CT scan of the abdomen for staging. There are mediastinal lymph nodes seen in the right paratracheal space measuring 1.7 cm in diameter.

Impression: There is an obstructing mass in the right mainstem bronchus with associated complete collapse of the right lung and right paratracheal lymph node enlargement. This most likely represents a squamous cell or small cell type bronchogenic carcinoma. There is a small pleural fluid collection on the right as well. There is no sign of cerebral metastases. The abdomen could not be evaluated well enough for comment.

RADIOLOGY REPORT # 2
CT Chest

Lung Case # 6

Date: 10/30/2010

The patient is known to have an obstructing mass in the region of the right mainstem bronchus. Enhanced axial CT imaging has been performed through the chest. There is a 2-3 cm mass in the region of the right mainstem bronchus just beyond the level of the carina which is causing a significant amount of atelectasis of the right lower lobe. There is significantly more aerated lung on the right on today's exam when compared to the prior study. The right upper lobe is completely aerated as are portions of the right middle lobe. Just distal to the bronchial mass, there is the impression of a larger 4-5 cm mass; however, this is surrounded by atelectatic lung and I cannot ascertain whether this is a separate mass, extension of the same mass, or even collapsed lung. Again, note is made of a slightly less than 2 cm right paratracheal lymph node. There is a small right sided pleural effusion. An Ng tube is seen in situ. The left lung is clear. No other abnormalities are seen.

Impression: Right mainstem bronchus mass as described above. I question the presence of a slightly larger mass slightly more distally. There is more aerated lung on the right on today's exam as compared to the prior study performed two days ago.

CYTOLOGY REPORT

Date: 10/29/2010

Clinical History: Total obstruction on the right mainstem bronchus totally occluded by large yellow-white mass.

Site of specimen: Lung

Final Diagnosis: Malignant cells present, difficult to type due to air drying artifact, however favor Non-Small Cell Carcinoma.

PATHOLOGY REPORT

Date: 11/01/2010

Final Diagnosis: Mass lesion (right main bronchus) – undifferentiated large cell carcinoma.

Gross: Received labeled "with the patients name consist of two pieces of tan brown tissue. The largest measures 0.5 X 0.3 X 0.1 cm and the smaller piece measures 0.3 X 0.2 X 0.2 cm. All submitted in one cassette.

Microscopy: The tissue, at six levels, showed mostly necrotic tissue and necrotic tumor. The latter was suggestive of a large cell carcinoma but a diagnosis could not be made. We went to the block at 45 levels. The very next 2 to 3 levels showed a collection of viable tumor cells and it is unquestionably a large cell carcinoma with no differentiation, but some of the cells show pink cytoplasm showing possible derivation from squamous cells. There is a smaller cell component but the nuclear morphology is not indicative of a true small cell carcinoma.