Discharge Summary

Date of Admission: 11/28/2007

Date of Discharge: 12/26/2007

Discharge Diagnoses:
1. Metastatic trophoblastic carcinoma
2. Asthma
3. Anemia
4. Depression

Discharge Medications: Vicodin-ES one to two every four hours p.r.n., Elavil 25 mg p.o. q.h.s., Dulcolax 5 mg p.o. q. day p.r.n., Dexamethasone 0.5 mg p.o. b.i.d., Lexapro 10 mg p.o. q. day, Pepcid 20 mg p.o. q. day, Protonix 40 mg p.o. q. day, Lyrica 50 mg p.o. t.i.d., Oxycodone 60 mg p.o. q.12 hours.

Hospital Course: This is a 23-year-old female who presented with right temporal intracranial hemorrhage. She was seen in consultation by neurosurgery and neurology. She was found to have what was thought to be intrauterine pregnancy as well and was also seen by obstetrics. She went to the operating room on 11/30 for a right temporal craniotomy to evacuate hematoma. She was seen by pulmonary postoperatively. She remained intubated. Further workup suggested metastatic trophoblastic carcinoma with markedly elevated beta HCGs and no further evidence of intrauterine pregnancy. She was seen in consultation by Dr. Gyn/Onc and biopsy showed cornual carcinoma and chemotherapy was started on the 8th as well as intracranial radiation. She was able to be transferred to the floor and slowly improved. She continued to have left sided weakness which slowly improved with therapy.

She was also found to have bacteremia with staph hominis and received a ten day course of IV antibiotics with improvement in her white count and fevers. She received fifteen days of whole brain radiation and chemotherapy as outlined by Dr. Gyn/Onc during her stay but still was requiring extensive assistance with her activity and was transferred to the Rehabilitation Unit.

Disposition: She was transferred to the Rehabilitation Unit for continued physical therapy and occupational therapy as well as continued chemotherapy.

History & Physical
11/28/2007

Chief Complaint: Headache

History of Present Illness: This is a 23-year-old female who presents to the Emergency Room with complaints of headache. She had been in the night before, as well, and was sent home with pain medications. She was told through testing that she was pregnant. She reports at home her headache worsened and she re-presented by EMS to the Emergency Room. In the Emergency Room, she was found to have a high-density bleed in the right temporal lobe, approximately 6 cm in diameter. She also has nausea and vomiting with her symptoms.

Past Medical History: Asthma

Medications: Albuterol inhaler p.r.n.

Social History: She denies smoking, alcohol or drug use currently. She currently lives at residential center.

Family History: Noncontributory

Review of Systems: As mentioned above

Physical Examination:
At presentation to the Emergency Room, BP: 99/47. P: 58. O2 saturation 100% on room air. T: 97.7.
General: Currently she is somnolent. I can awaken her for a question at a time and then she falls back to sleep. Pupils are sluggishly reactive. Oropharynx is clear.
Neck: Supple
Lungs: Clear to auscultation bilaterally
Cardiovascular: Reveals a regular rate and rhythm without murmur
Abdomen: Soft, nontender and nondistended with normal active bowel sounds.
Extremities: Reveal no clubbing, cyanosis, or edema.

Laboratory Data:
CT is noted above. Beta-HCG 58,000. Urine drug screen is negative. Ethanol less than 10. Sodium 142, potassium 3.8, chloride 108, CO2 24. BUN 8, creatinine 0.7. White count 9.1, hemoglobin 12.1, platelets 339. INR 1.0.

Assessment: 23-year-old female with a right temporal bleed

Plan:
1. We will continue to monitor her in the ICU. Blood pressure appears to be stable. Neurosurgery has been consulted, as well as obstetrics due to her intrauterine pregnancy, probably somewhere in the middle of the first trimester.
2. We will continue morphine p.r.n. for pain control.
3. Also, give her albuterol nebulizers due to her asthma history and her positioning that will be required and lack of activity.

Gynecology Consultation
11/28/2007

History: Patient is a 23-year-old white female gravida V, para III, SAB I, unknown last menstrual period on no contraception who presented to the Emergency Room with a headache. There she was found to have a temporal lobe bleed, approximately 5 centimeters. She is currently in the ICU and her history is provided by the patient.

The patient was informed in the Emergency Room that she was pregnant. She denies any obstetrical complicating symptoms such as vaginal bleeding, pelvic pain, or abnormal discharge. She has noted nausea for two days and did note breast tenderness.

While in the Emergency Room she was noted to have a beta HCG of approximately 57,000, non-contrast CT revealed a 5 cm. temporal lobe presumed bleed.

Past Medical History: Includes anemia

Current Medications: None

Allergies: Augmentin and Penicillin. The patient was told not to take these since childhood.

Past Surgical History: Includes cholecystectomy

Past Gyn History: Includes remote history of Chlamydia, describes an abnormal PAP smear but did not require any treatment. Her gynecologic and obstetric care is provided by Hospital B.

Family History: Unremarkable per patient

Past Ob History: Spontaneous vaginal delivery x three, largest infant was 9 pounds. She denies any history of toxemia, gestational diabetes or other complicating pregnancy symptoms.

Social History: She currently resides at residential center. Her children are with their father. She does not work outside the home. She denies any smoking, alcohol use or substance use.

Review of Systems: As described

Physical Examination:
General Appearance: She is resting in bed, holding her head, talking quietly
Lungs: Clear to auscultation in all fields
Heart: Regular rate without murmur
Abdomen: Soft, nontender without any rebound, guarding or organomegaly

Laboratory as previously described and radiological status previously described.

Assessment:
1. Pregnant state
2. Presumed intracranial temporal lobe bleed, etiology uncertain

Plan: I discussed with the patient the need for establishing viability. I also explained the risks and benefits of radiographic evaluation and with her current clinical situation the importance of establishing intracranial diagnosis for developing a treatment plan. I explained that MRI is very acceptable from an obstetrical standpoint and that any testing required for the treatment of her cranial status is needed. Will continue to follow. Will order OB ultrasound.

Neurosurgery Consultation
11/28/2007

Reason for Admission: Right spontaneous intracerebral hemorrhage

History of Present Illness: The patient is a 23-year-old white female evaluated for right temporal hemorrhage. She reports the onset of headaches at 09:00 p.m. on the night prior to admission while driving. Her headache was primarily right frontal and right retro-orbital. She had complained of associated nausea and vomiting. She denied any neck stiffness, numbness, tingling, or weakness. She came to the emergency room and underwent CT scan of the head, which showed a 4 cm x 3 cm intraparenchymal hemorrhage in the right temporal lobe without significant subarachnoid hemorrhage. The hemorrhage was distinct from the basal cistern.

Allergies: Penicillin and Augmentin

Past Medical History: Significant for asthma

Past Surgical History: Includes cholecystectomy

Social History: The patient works as a telemarketer. She is single and has three children. She denies tobacco use.

Review of Systems: Her review of systems reveals an elevated beta hCG

Physical Examination: On examination, the patient is a well developed, well nourished female who looks her stated age. Her head is atraumatic. Her eyes reveal pupils that are round and reactive to light. Her extraocular movements are intact. She appears to have a left superior quadrant anopsia to confrontation. Her speech is clear and fluent. She is oriented x 3. Her sensory exam reveals normal pinprick sensation throughout the lower extremities. Her motor exam reveals 5/5 strength throughout the upper and lower extremities. Her deep tendon reflexes are symmetric. Her gait is untested.

Impression: Spontaneous right temporal intraparenchymal hemorrhage of unknown etiology

Differential Diagnoses: Vascular malformation versus tumor versus vasculitis

Recommendations:
1. MRI
2. MRA
3. Neurology consult
4. Sedimentation rate, ANA rheumatoid factor
5. Will monitor in the ICU and repeat CT scan in the morning

Radiology Report
11/28/2007

CT Scan Brain without Contrast

Clinical Indication: Headache

An emergency CT scan is performed on 11-28-2007 at 6:06 AM. There is a moderately large acute hemorrhage involving the right temporal lobe. This measures 4 cm in its greatest AP length and 2.6 cm across. There is early mild mass effect present. A small amount of hemorrhage is seen in the posterior horn of the right lateral ventricle. No subdural or epidural fluid collection is seen.

Acute right temporal hemorrhage

Radiology Report
11/28/2007

MRI Brain

Clinical Indication: Mental status changes, transient ischemic attacks

Technique: 2D and 3D TOF images of the circle of Willis were obtained by magnetic resonance imaging with and without contrast administration in the amount of 17 cc of gadodiamide contrast media.

Findings: The bilateral intracranial carotids, MCA's, ACA's, PCA's, and vertebrobasilar system demonstrate no evidence of aneurysmal dilatation, stenosis, or occlusion. The vessels are in fact, fairly pristine in appearance.

Impression: Normal MRI Angio Brain. No evidence of stenosis or aneurysmal dilatation.

Radiology Report
11/28/2007

MRI Brain with and without Contrast

Clinical Indication: Headache, mental status changes

Technique: Multiplanar, multipulse sequences of the brain were obtained with and without contrast administration in the amount of 17 cc of gadodiamide contrast media.

Findings: Within the right temporal lobe we note a large focal area of hemorrhage measuring approximately 4.5 x 3.5 cm. This causes some mass effect upon the right temporal horn and contains signal characteristics consistent with deoxyhemoglobin and intracellular methemoglobin. This makes the age of the hemorrhage within several days to a week. On diffusion weighted sequences we also note numerous areas of increased signal intensity in the bilateral frontal lobes as well as a more focal area measuring 1 cm in the centrum semiovale on the right. Multiple punctate areas are also seen in the right occipital lobe and also several in the cerebellum within the right hemisphere. Cortical lesions are also noted within the left frontal lobe. These are very numerous and are all consistent with small areas of stroke. Post contrasted images demonstrate very little contrast enhancement of the larger area seen within the right temporal lobe. No other obviously enhancing foci are seen. There is no midline shift or other obvious areas of herniation. Differential considerations for this process include hypertensive hemorrhagic strokes, multiple small embolic strokes from an unknown source but could also include etiologies such as vasculitides (idiopathic, drug related or inflammatory.)

The visualized paranasal sinuses and orbits are clear. There are no filling defects to suggest venous sinus thrombosis.

Impression: Large area of hemorrhagic infarction seen within the right temporal lobe with blood products of various ages also noted. This is consistent with a subacute area of hemorrhage. We also note multiple punctate strokes seen throughout the cerebrum as described above. Differential considerations include primarily hypertensive strokes vs. embolic phenomenon. Various vasculitides as discussed above could also be considered.

There is no midline shift or mass effect at this time. Continued followup is recommended.

Radiology Report
11/28/2007

Pelvic Sonogram

Clinical Indication: Pregnant patient, evaluate viability

Patient reportedly had a quantitative Beta HCG value of 55,000. Sonography was performed transabdominally, the patient declined transvaginal evaluation.

Uterine size is 9.7 x 4.6 cm. There is a fluid collection in the endometrial canal which is irregularly shaped and somewhat echogenic, this may represent a gestational sac but does not appear definitively normal in appearance transabdominally, and this may represent a failed pregnancy or abortion in progress. Evaluation with serial quantitative Beta HCG values is suggested.

The right ovary is 2.8 x 1.7 cm in diameter, the left is 2.5 x 2.3 cm and both appear normal. No adnexal masses are identified.

Impression: Intrauterine fluid collection may represent a gestational sac although this does not appear normal and may represent a failed pregnancy or abortion in progress.

Normal appearance of the ovaries.

Followup with quantitative beta HCG values are recommended to determine if these are rising or falling. If they are rising, repeat sonographic evaluation is suggested.

Neurology Consultation
11/29/2007

History of Present Illness: This 23-year-old female patient is admitted with severe headache. The patient denies having any history of headaches in the past. After presentation to the Emergency Room a CT scan of the head was performed which demonstrates an area of acute intracerebral hemorrhage measuring about 4 centimeters in the right temporal lobe. There is a small amount of hemorrhage seen in the posterior horn of the right lateral ventricle. The patient has had no hemiparesis or paresthesia. She denies any history of trauma. There has been no history of drug abuse. The patient then had a MRI scan of the brain, which also shows small areas of abnormal signal intensity in the frontal lobes bilaterally and in the right periventricular region. Some of these do enhance with contrast. The possibility of a small ischemic strokes or vasculitis is considered.

Past Medical History: Unremarkable. She does have a history of miscarriages x2. She also has three children, which she has delivered ages 4, 2 and 9 months. There is a history of asthma and anemia.

Allergies: Augmentin and Penicillin

Current Medications: None at the time of admission

Past Surgical History: Cholecystectomy

Social History: The patient is not married, but lives with a significant other in a shelter. She does not smoke cigarettes or drink alcohol.

Family History: Noncontributory

Review of Systems: The patient denies recurrent headaches. She denies any fever or chills. She has no focal weakness or numbness. She has no history of seizure or syncope. She denies any skin disorders. She has had no joint pain. There is no history of connective tissue disease or pleurisy.

Physical Examination:
Vital Signs: BP: 104/69, Heart Rate: 55.
General Description: The patient appears to be in severe pain
HEENT: The pupils are 4 mm. The optic discs were sharp. There appears to be a partial left hemianopsia.
Neck: Supple
Neurologic: Cranial nerve examination II through XII is otherwise unremarkable. There is no carotid bruit. Motor examination reveals intact grip strength bilaterally. Deep tendon reflexes are 2/4. Plantar responses are downgoing. Sensory examination is intact to light touch and pinprick. There is no finger-nose-finger ataxia. There is no heel to shin ataxia.

Impression: Acute right temporal and posterior cerebral hemorrhage with apparent small scattered ischemic lesions in the cortex bilaterally. The possibility of cerebral vasculitis could be considered. Rule out a coagulopathy. Rule out a cardiac source of emboli.

Recommendations: Start Cerebyx for seizure prophylaxis. Vasculitis work up is pending. Including lupus anticoagulant. We will start Decadron empirically. An echocardiogram will be ordered, but the patient may need transesophageal echocardiogram as well.

Thank you for allowing me to participate in the care of this patient.

Operative Report
11/30/2007

Preoperative Diagnosis: Right temporal hemorrhage
Postoperative Diagnosis: Right temporal hemorrhage

Operation Performed: Right temporal craniotomy needed for evacuation of hemorrhage

Estimated Blood Loss: Minimal
Anesthesia: General endotracheal intubation
Complications: None
Drains: None

Indications: In the ICU I evaluated the patient and I would defer to that evaluation. I talked to the mother about her increasing intracranial pressure, right temporal hemorrhage and dilation of her right pupil. I was concerned about impending herniation and subsequent death. I recommended to the mother that we proceed with a right temporal craniotomy for evacuation of the intracerebral hemorrhage. I communicated to her by phone and this was witnessed by Nurse Mary. I explained the risks of surgery to include bleeding, infection, weakness, numbness, paralysis, coma, stroke, death and anesthetic complications as well as recurrent bleeding. The patient's mother consented on behalf of her daughter who was unable to provide consent. The patient was being emergently intubated at the time of this discussion.

Procedure: The patient was rushed the operating room and induced under general anesthesia without difficulty. The right side of her head was quickly shaved and prepped. She was maintained in the Mayfield headholder. An inverted U-incision was made starting in front of the right ear and carried up to the break of the skull and then posteriorly to behind the right ear. Raney clips were applied throughout. A skin flap was turned down with the temporalis muscle and four burr holes placed. A right temporal craniotomy was turned using the craniotome. The dura was rock hard. I used a 15-blade knife to incise the dura and then Metzenbaum scissors to incise it in an inverted U-shaped fashion, hinged along the base of the exposure. Within seconds the brain immediately herniated out into the field. The gyri were markedly swollen. Before I could make a cortical incision the surface of the brain erupted and immediately there was spontaneous expulsion of intracerebral hemorrhage. I grabbed a couple of brain retractors and held that area of the dehiscence of the cortex and began to remove clot using suction and cautery. This was done without difficulty. The brain was very swollen. I inspected the clotted bed and did not see any other organized clot. I looked anteriorly and inferiorly.

I lined the clot bed with Surgicel. I then thought about closing the dura but was unable to because of the swollen brain. I felt that with evacuation of the hemorrhage the brain was significantly relaxed, enough where I could place a bone flap. I secured the bone flap on three points using the rapid flap system. The wound was irrigated copiously with Bacitracin. The galea was approximated using interrupted suture of 2-0 Vicryl. The skin was closed with staples. The patient tolerated the procedure well. She was moved from the Operating Room to the ICU in critical condition.

Pathology Report
11/30/2007

Clinical Information: Right temporal hematoma

Specimen:
1 Blood clot cranial
2 Brain biopsy

Gross Description:
Specimen #1 consists of a 5 cm aggregate of dark blood clot. Representative sections are submitted in Cassette 1A for microscopic examination.

Specimen #2 consists of an irregular fragment of soft tissue measuring 1 x 0.8 x 0.7 cm. The specimen is sectioned and submitted in Cassette 2A for microscopic examination.

Final Diagnosis:
1) Soft tissue, cranial, biopsy: Organizing blood clot.
2) Brain, biopsy: Brain tissue with recent hemorrhage. See comment.

A microscopic examination was performed and the findings justify the above diagnosis.

Pulmonary Consultation
11/30/2007

Reason for Consultation: Respiratory failure, vent management, status post intracranial hemorrhage

Patient is a 23-year-old female who came to the emergency room complaining of headache. Initially she was sent home with pain medicines and she was also told that she is pregnant. She re-presented to the emergency room after complaining of worsening pain and was found to have significant bleed in the right temporal lobe. She was admitted initially on 11/28/2007 and has been followed closely in the Intensive Care Unit. This morning according to the patient's family and nurse she developed unequal pupils. CT scan was performed urgently which showed the temporal hemorrhage on the right side had increased with increasing edema as well. Mannitol was given immediately. She was evaluated shortly after the CT scan showing her pupils equally round and reactive to light at that point with equal strength and then 15 minutes after this she again dilated her right pupil and became unresponsive. At that time she was brought urgently to the operating room for evacuation of a hematoma with right temporal craniotomy. She currently remains in the Intensive Care Unit on the ventilator sedated. She is moving her right upper and lower extremities, but not her left currently.

Past Medical History: Does include some childhood asthma, but according to her mother has not been an issue recently. She has a history of two miscarriages in the past and three children alive and well. She has a history of anemia as well. She has never had any evidence of previous hypercoagulable workup performed.

Allergies: Augmentin and Penicillin

Medications: None at the time of admission. Medical record was reviewed at this time and has a complete list of her medications.

Social History: Includes no tobacco use or alcohol. She is not married.

Family History: Noncontributory

Review of Systems: Unobtainable at this time and she remains on the ventilator

Physical Examination:
Vital Signs: T: Afebrile. P: 72. BP: 131/75. Saturations are 100% on current settings with assist control. Tidal volume is 550. R: 12. PEEP of 5. FIO2 is 0.4. General: She is sedated on the ventilator, but does move her right upper and lower extremities.
HEENT: Pupils are equally round. Endotracheal tube is in position.
Neck: Supple. No lymphadenopathy.
Chest: Clear to auscultation bilaterally. No active wheezes.
Cardiovascular: Regular rhythm and rate
Abdomen: Soft, nontender, and nondistended. Bowel sounds are positive.

Extremities: Show no cyanosis, clubbing or edema

Laboratory Data: Reviewed. Most recent blood gas shows a pH of 7.57, pCO2 of 24, pO2 of 145 prior to most recent vent changes. Sodium 139, potassium 2.7, Chloride 105, bicarb 18, BUN 6 and creatinine 0.7. Platelet count 519,000. Hemoglobin 12.6. White blood cell count 12.4. INR is 1.1.

Chest x-ray is reviewed showing no evidence of significant infiltrates. Endotracheal tube in good position.

Impression: Patient is a 23-year-old female admitted initially for severe headache and found to have a large intracranial hemorrhage that increased in size in the right temporal area and was taken urgently for craniotomy this afternoon. She now is in the Intensive Care Unit and remains on the ventilator. Her blood gas shows excellent gas exchange at this time. Will follow serial ABGs and watch neurologic status closely. She does have SCDs in place and Protonix has been written for. She is also already on Xopenex 1.25 neb four times a day.

Thank you for the opportunity to participate in patient's medical care. If you have any further questions or concerns please do not hesitate to call.

Radiology Report
11/30/2007

Portable Chest

Clinical Indication: ET tube placement, line placement

Single view chest is acquired 11-30-2007 at 11:34 hours. ET tube is above the level of the carina. There is a right IJ central venous catheter in place with tip in the SVC. No obvious pneumothorax is noted. There is a nodular density adjacent to the right heart border for which further evaluation with CT is strongly recommended.

Satisfactory ET and IJ tube placement without obvious pneumothorax.

Nodular density adjacent to the right heart border in right lung base. It measures approximately 2.4 x 2.4 cm. Recommend correlation with CT as this was not present on the patient's previous examination and pulmonary mass cannot be excluded.

Cardiology Consultation
12/01/2007

The patient is a 23-year-old white female. She has no primary care physician. She is admitted by Dr. Family Practice and we are asked to see her by Dr. Family Practice because of a patent foramen ovale. She was admitted with a headache and had a large right temporal lobe intracranial hemorrhage. In addition, a MRI scan apparently shows multiple small lesions in the frontal lobes and in the right periventricular region.

She had an echocardiogram, which shows a moderate sized patent foramen ovale, but no evidence of an atrial septal aneurysm. The atrial septum is well visualized by this surface study.

She underwent a craniotomy. She, apparently, nearly herniated. She is now on the ventilator.

According to a young man, who is apparently her significant other, she has no other medical problems. She does not have hypertension, hyperlipidemia, or diabetes. She has had her gallbladder removed. She does have a history of childhood asthma. She has had two miscarriages. She has three children, who are alive and well. She does have a history of anemia.

Allergies: Augmentin, Penicillin and Amoxicillin

Medications: She is not on any medicines on a regular basis

Family History: Apparently, there is no family history of cardiac disease

Social History: She does not smoke cigarettes, use alcohol or illicit drugs. She is homeless and lives in a shelter. She is not married.

Review of Systems: Obtained from her significant other, indicates that she has no problems with her head, ears, eyes, nose, throat, thyroid gland, ulcers, kidney trouble, current asthma, blood in her stool or black, tarry stools, blood in her urine, previous stroke or seizure. She, apparently, recently was treated for head lice.

Physical Examination:
Vital Signs: BP: 120/75. Heart Rate: 71 beats per minute. She is intubated, on the ventilator, on propofol and unresponsive currently.
HEENT: Her pupils were equal in size now. Her thyroid gland was unremarkable, but difficult to assess because of a right internal jugular line.
Cardiovascular: Reveals normal PMI with normal first and second heart sound. There was no obvious murmur or gallop. Her jugular venous pressure on the left was not elevated and there was no left carotid bruit.
Lungs: Clear.
Abdomen: Soft and nontender. No masses or hepatosplenomegaly was noted
Extremities: Examination of the extremities reveals no peripheral edema. Peripheral pulses are 2+ and femoral pulses are 2+.

She has an elevated beta-HCG and apparently is pregnant, but the fetus is thought to be nonviable. Her renal function is normal. Her hemoglobin is 11.5, platelet count is normal. Her chest x-ray is clear, although on CT of the chest there is apparently scattered areas of abnormal density in the lung fields, some of which are rounded in the right lung, most likely reflecting inflammatory rounded atelectasis. She has normal MRI of the brain. The MR of the brain showed multiple punctate strokes seen in the cerebrum, thought to be related to either hypertensive strokes, embolic phenomenon, or vasculitis. Electrocardiogram is not available.

Assessment: The significance of the patent foramen ovale in this patient is absolutely uncertain. There is no associated atrial septal aneurysm that would increase risk of recurrent stroke and at present there is no clear indication to close the patent foramen ovale. In fact, by our FDA mandated protocol, we cannot close the patent foramen ovale unless she has failed drug therapy. At this point, I would treat this patient as you would any other patient with a similar situation. I do not believe that she needs a transesophageal echocardiogram, as we can see the patent foramen ovale and the atrial septal aneurysm well by the surface study. A venous duplex study of her legs has been ordered. If this is positive, then we will reassess her. After she has recovered from all of this, we will certainly be happy to reassess her at that point as well, but again at this point there is no clear indication to close the patent foramen ovale.

I appreciate the opportunity to see this nice lady. Thanks again for your support. If you have any questions, please do not hesitate to contact us.

Radiology Report
12/01/2007

CT Chest

Clinical Indication: Chest pain

Discussion: Multiple 5 mm interval scans performed from the thoracic inlet to the level of the diaphragm. Scans are performed during the dynamic administration of 85 cc of Omnipaque 350. There is an endotracheal tube in place. There is no evidence for hilar or mediastinal adenopathy. Heart is not enlarged. No pericardial fluid is seen. There is a soft tissue nodule in the central right lung field and a second rounded nodular density in the posterior right lung base. This most likely reflects rounded atelectasis. Some mild basilar atelectasis seen on the left. Rounded neoplastic deposits would be unusual in this 23-year-old.

Scattered areas of abnormal density in the lung fields some of which are rounded in the right lung field most likely reflecting inflammatory rounded atelectasis. Follow-up suggested to be sure these findings resolve.

Radiology Report
12/02/2007

Sonogram of Pelvis
Clinical Indication: Positive HCG, abdominal pain

Technique: Pelvic ultrasound via transabdominal and transvaginal approach. 2D, real-time sonographic images were obtained by the sonographer.

Findings: Comparison is made to a prior exam dated 11/28/2007. Within the right adnexa on today's exam, we note an approximately 1 cm heterogeneously isoechoic mass which demonstrates essential area of an echogenicity consistent with a gestational sac. This is consistent in appearance with a double decidual reaction in the setting of an ectopic pregnancy. Very little flow; some flow is seen around the periphery. No obvious fetal pole or yolk sac are appreciated. This was not definitively identified on the previous exam as transvaginal images were not obtained. The uterus again measures approximately 10 x 5 cm and demonstrates increased echogenicity throughout. The endometrium is somewhat larger on today's exam measuring approximately 10 mm. This may represent a component of hemorrhage. We do note the left ovary which measures approximately 1.8 x 2.5 x 1.7 cm. The right ovary is seen lateral to the suspected ectopic pregnancy and measures 2.5 x 1.5 cm. Flow was seen throughout both ovaries. A small amount of free fluid is noted with the cul-de-sac.

Impression:
1. Probable double decidual reaction seen within the right adnexal medial to the right ovary
2. Echogenic and somewhat prominent endometrium measuring 10 mm on today's exam
3. A small amount of free fluid is noted in the pelvis. The nurse was notified in the intensive care unit at 1130 hours.

Radiology Report
12/04/2007

CT Chest

Clinical Indication: Upper extremity thrombophlebitis, respiratory insufficiency, pregnant patient with intracranial hemorrhage and mass effect

Technique: Axial images were obtained of the chest following the bolus administration of 100 cc Visipaque 320 intravenously. Thin cut axial and paracoronal images were then reconstructed through the pulmonary arteries for purposes of CT angiography of the pulmonary arteries.

Creatinine level is 0.6.

CT angiographic evaluation of the pulmonary arteries shows no evidence of a pulmonary embolus.

Patient is intubated with endotracheal and nasogastric tubes, without evidence of a line placement complication.

Peribronchovascular patchy infiltrates are seen in the right lower lobe, with a rounded peripheral apparently partially enhancing 2.3 cm mass or rounded area of consolidation in the posterior basilar right lower lobe. There is an additional 11 mm nodule in the posteroinferior aspect of the right upper lobe. There is no pleural fluid. No enlarged lymph nodes are identified.

Impression:
No evidence of pulmonary embolus.

Mixed enhancement nodule or peripheral rounded consolidation in the posterobasilar right lower lobe measuring 2.3 cm in diameter.

Surrounding peribronchovascular consolidation of the right lower lobe may represent pneumonia.

Small right upper lobe nodule 11 mm in diameter, indeterminate appearance. Recommend followup of the above findings to evaluation progression or resolution.

Endotracheal and nasogastric tubes in place.

Operative Report
12/05/2007

Preoperative Diagnosis:
1. Increasing beta HCG with ultrasound findings suggestive of ectopic pregnancy
2. Cerebral hemorrhage unknown etiology

Postoperative Diagnosis:
1. Increasing beta HCG with ultrasound findings suggestive of ectopic pregnancy
2. Cerebral hemorrhage unknown etiology

Operation Performed:
1. Exploratory laparotomy and dilatation and curettage
2. Cervical cultures
3. Removal of peritubular cysts

Anesthesia: General

Estimated Blood Loss: Minimal

Frozen Section Diagnosis: Residual reaction in uterus

Findings: Normal uterus, bilateral normal ovaries, bilateral normal fallopian tubes with peritubular cysts. No cystocele or rectocele. Scant vaginal discharge.

History: Patient is a 23-year-old white female who is gravida VI, para III, SAB II who presented to the hospital with headaches. She was noted to have a temporal lobe bleed. She had a positive pregnancy test on admission. Initial ultrasounds were suggestive of probable nonviable intrauterine gestation. Her progesterone level at that time was 4.6. She then became unstable requiring an emergent craniotomy and the plan because of her instability was to perform expectant management, anticipating spontaneous miscarriage. No etiology for her bleeding was detected at the time of her craniotomy. Her beta HCG fell initially and then began to rise. She stabilized. A follow-up transvaginal ultrasound was performed in order to assess the quantity of tissue within the uterus to better suggest a prognosis for expectant management. At that point it was no intrauterine content and 1 centimeter adnexal structure consistent with ectopic pregnancy. We performed a follow-up ultrasound, which showed fluid, revealed increase in size to 1.7 cm suggesting fluid in her right adnexa and tube. Because of the continued rise in her beta HCG, her sedated state and level of beta HCG we recommended proceeding with exploratory laparotomy for removal of anticipated ectopic pregnancy.

I obtained consent from the patient's mother. We reviewed the risks of surgery, which included but are not limited to pain, bleeding, infection, damage to internal organs, risks of anesthesia, possible damage to bowel, bladder or urinary system, as well as the possibility we may not locate the pregnancy. We discussed if there were no pelvic findings we would proceed with dilatation and curettage.

Procedure: The patient was taken from the ICU on the ventilator to the Operating Room. The abdomen was prepped in the usual fashion. Bimanual exam revealed the above findings. Cultures for gonorrhea, Chlamydia and aerobic cultures were obtained and a vaginal prep was carried out. A vertical minilaparotomy incision was made in the suprapubic region and carried down through subcutaneous tissue. The fascia was incised in the midline and extended cephalad and caudad. Rectus muscles were split. The peritoneum was elevated and sharply entered. The above findings were documented. There was no evidence of any ectopic pregnancy, dilated tube. The cul-de-sac was free of any abnormality. Both ovaries were grossly normal. There was no evidence of ovarian pregnancy. Anterior to the uterus was benign and there was no evidence of any blood coming from either fallopian tube and no gross evidence of any ectopic pregnancy. Because of these findings and she had already been prepped we proceeded with dilatation and curettage. The uterus was noted to be anteverted on clinical exam. A single-toothed tenaculum was placed in the anterior lip of the cervix. The cervix was dilated with a #15 Pratt dilator. A #7 Berkley suction curet was then inserted in the uterus and suction curettage was performed obtaining a small amount of tissue. I sent this for frozen section. The result was decidual tissue without products of conception.

At this point we had surveyed the vagina, the endometrium, fallopian tubes, ovaries, cul-de-sac, as well as examining as much of the omentum as possible and there was no evidence of a source for the beta-HCG.

At this point the fascia was closed with running stitch of 0 Vicryl x two. The subcutaneous tissue was hemostatic. 0.25% Marcaine was instilled and staples were placed.

Counts were reported to me as being correct.

We drew another beta-HCG while in the OR to see if there was any possibility that the patient may have miscarried and this was unobserved. The beta-HCG returned noted to be 89,000 and at this point without an identifiable source of the beta-HCG will review with neurosurgery and pulmonary the possibility of gestational trophoplastic disease as the source of the beta-HCG and whether it may be from a cranial or pulmonary source. Would also recommend obtaining GYN oncology consultation for further recommendations.

I called the patient's mother following the procedure and explained the operative findings and our reevaluation of the beta-HCG and explained that we would obtain further consultation if this is the case.

Signed: Dr Gynecology

Pathology Report
12/05/2007

Clinical Information: Ectopic pregnancy

Specimen:
1 Uterine contents - looking for products of conception
2 Left paratubular cyst

Intraoperative Consult:
Frozen Section: 1FS) Decidualized endometrium, no products of conception identified

Gross Description:
Specimen #1 consists of soft hemorrhagic fragments of tissue in aggregate measuring 3 cm. The specimen is submitted for frozen sectioning and is then placed in Cassette 1FS for permanent sections.

Specimen #2 consists of three pedunculated cysts measuring from 0.4 x 0.3 x 0.3 cm up to 2.5 x 0.6 x 0.6 cm. The tissue is submitted in Cassette 2A for microscopic examination.

Final Diagnosis:
1. Uterine Contents: Fragments of decidualized endometrium. No chorionic villi are identified
2. Left Paratubal Cyst: Hydatid cyst of Morgagni

A microscopic examination was performed and the findings justify the above diagnosis.

Gynecology/Oncology Consultation
12/06/2007

Chief Complaint: Intracranial hemorrhage and positive pregnancy test

History of Present Illness: Historical material obtained from medical records, mother and significant other

Patient is a 23-year-old female with three living children who is admitted via the ER 11/28/2007 with headache and loss of consciousness. Neurologic work-up was undertaken with a cerebral MRI showing a large area of hemorrhagic infarction in the right temporal lobe area. After stabilization with corticosteroids and anticonvulsants, the patient underwent a right temporal craniotomy with evacuation of clot and release of increased intracranial pressure. Postoperatively the patient persisted with decreased cerebral function, aphasia and left hemiparesis.

Hospital work-up on admission showed positive pregnancy test and pelvic sonography suggested a left adnexal cystic lesion consistent with an ectopic pregnancy. Seven days after craniotomy she underwent uterine curettage and mini laparotomy with removal of a hydatid cyst of Morgagnii from the left side. There was no indication of ectopic gestation and the uterine curettings had decidualized endometrium without villa. Despite no pregnancy in the pelvis a pregnancy test continued to increase and the serum beta HCG was obtained giving a result of 89,000 million IU/ml. CT scanning was performed looking for area of additional ectopic gestation. CT scans of the chest and abdomen showed a right posterior lung lesion measuring 2.4 cm in diameter and a second intraparenchymal right lung lymph node. Her liver was normal and there was no other evidence of significant intraabdominal disease.

Review of the patient's pregnancy history showed an uncomplicated term delivery at Hospital B in April of 2007. She apparently had been evaluated for possible missed abortion in the early fall because of a positive urine pregnancy test.

Past Medical History: The patient reports usual childhood illnesses including asthma. As an adult she has a history of cholecystitis and cholelithiasis for which she underwent laparoscopic cholecystectomy. She also carries a history of iron deficiency anemia.

Allergies: Penicillin

She denies prior blood transfusion. She denies the use of alcohol. She denies the use of tobacco. She denies the use of street drugs.

Social History: She lives with her children and her significant other

Family History: Noncontributory

Physical Examination:
Vital Signs: HT: Approximately 5'6". WT: 180 pounds. BP: 130/60. P: 94. R: 18.
General Description: She is an ill appearing patient with decreased mentation. She is lying in bed with her head deviated to the left side and decreased motion in the left side of her body. She has a right temporal craniotomy incision and Foley catheter in place.
HEENT: Pupils equal, round and react to light. Both pupils are dilated. She has no scleral icterus. Conjunctivae are clear.
Neck: Showed a decreased range of motion and deviated to the left side. She has no thyromegaly and no carotid bruit.
Chest: Shows symmetrical excursion and normal breath sounds
Breasts: Not examined
Heart: Regular rhythm without murmurs
Abdomen: Obese, soft and nontender. She has laparoscopy trocar sites from the cholecystectomy and a midline mini laparotomy scar. Bowel sounds were normally active. The abdomen was nontender. No abdominal masses were noted.
Lymphatics: The patient had no palpable supraclavicular, axillary or inguinal adenopathy.
Extremities: Show distal edema without lesions
Pelvis: Deferred

CT scans were reviewed and there is a lung lesion as noted above which was highly suspicious for choriocarcinoma.

Impression:
1. Cerebral metastatic choriocarcinoma also with pulmonary metastases
2. Status post right temporal craniotomy and mini laparotomy with uterine curettage
3. Residual left hemiplegia
4. Chronic iron deficiency anemia

Disposition: Clinically a patient with intracranial bleeding and an 89,000 beta HCG has metastatic choriocarcinoma until proven otherwise. I recommended fine needle core aspiration of the right pulmonary lesion to confirm the diagnosis of malignancy. If this biopsy is positive, as I suspect it will be, I would recommend urgent cerebral radiation and the institution of systemic chemotherapy using the EMA-CO regimen.

Radiation Oncology Consultation
12/07/2007

Chief Complaint: Headache, questionable metastatic choriocarcinoma

History: Please note the patient is difficult to arouse although she is appropriate with her responses to my questions, though much of the history is obtained from review of her chart on admission. She is a 23-year-old female who had presented to the emergency room, I believe, a couple of times within about 24-hours with complaints of a headache. She had a CT of the head and was found to have what appeared to be a hemorrhage in her right temporal lobe. She was admitted to the Intensive Care Unit for observation stabilization. She initially had full motor function. It was also noted that her beta-HCG was 58,000. It was thought that she had an intrauterine pregnancy. She has had a very complicated hospitalization. She did undergo an MRI of the brain, which showed this apparent infarct in the right temporoparietal area and then they also noted what they called multiple punctate strokes throughout the cerebrum. She had ultrasound of the pelvis and the vagina and it was felt that the patient may have an ectopic pregnancy. She decompensated at one point with loss of consciousness and change in pupil size. Mannitol was given. She was intubated and she did undergo an urgent craniotomy with note in the chart with the findings of hemorrhage and pressure was relieved. Pathologic tissue obtained revealed organizing blood clot as well as brain tissue with recent hemorrhage. She then ultimately underwent exploratory laparotomy with dilatation and curettage for an expected ectopic pregnancy. However, the findings at the time of operation revealed normal uterus and ovaries and fallopian tubes with some peritubular cysts. No evidence of any primary site for possible rise in her beta-HCG. Of note the patient also had a CT scan of her chest which shows two nodules in the right lung, one about 1 centimeter in size in the central right lung and one in the base about 2 centimeters in size. There are also some other inflammatory or possible inflammatory regions. The patient has had a continued sustained elevation in her beta-HCG, currently today over 71,000. With the current picture of a young female with no viable pregnancy, elevated beta-HCG, lung nodules, possible intracranial lesions it is felt that the patient may have metastatic choriocarcinoma. We were asked to consult regarding treatment options.

Allergies: Amoxicillin, Penicillin and Augmentin all Penicillin basis

Medications:
1. Dexamethasone 4 mg IV q.6
2. Dilantin 100 mg IV q.8
3. Mannitol 25 grams IV q.6
4. Prenatal vitamin daily
5. Protonix 40 mg IV daily
6. Morphine p.r.n.

Past Medical History: She is G4, P3, and SAB 1. History of asthma.

Psychosocial History: Again this is obtained from the chart, that she denies smoking, alcohol or drug use currently. I do know that she is living at residential center and she did tell me that her three children are living with their father currently.

Family History: Noncontributory

Review of Systems: She is really not forthcoming with much information this morning. She does complain of a headache. She points to the right frontotemporal region. She also complains of lower abdominal pain and according to the chart had no other specific review of systems complaints on admission.

Physical Examination:
She is a young female. She is sitting propped up in the ICU bed. She will open her eyes and follow commands. She does answer a few questions with short answers.
Vital Signs: T: She was afebrile. BP: 131/72. P: In the 90s. Oxygen saturation on room air is also in the 90%. She has central line in place in the right jugular region.
Head/Neck: She has evidence of previous craniotomy with staples in place in the right temporal region. She does open her eyes to command. Her pupils were equal today. She will not follow commands with extraocular muscles. Oral cavity shows a red tint from previous recent oral intake. No obvious lesions. Trachea was midline. No palpable cervical or supraclavicular adenopathy. Again, central line in place in the right neck.
Cardiovascular: Regular rate and rhythm
Lungs: Clear bilaterally anteriorly
Abdomen: Staples in place in the pelvic region. Bowel sounds are present. There is no appreciated or palpable hepatomegaly or masses.
Extremities: She has pneumatic compression devices in place
Skin: Showed no obvious petechiae or rashes. Apparent fungal infection of the toenails.
Neurologic: She has a dense left hemiplegia that is complete. The right side she moves normally her upper extremities. Lower extremities, her great toe is downgoing on the right and upgoing on the left.

Laboratory Data: Paths from two procedures was as stated. Beta-HCG today is 71,015.

Scans as previously stated.

Assessment and Plan: Patient is a 23-year-old female with presentation consistent with a stroke, but with abnormalities in multiple areas on MRI of her brain, the largest in the right temporal lobe, at least two nodules in the lungs and probably more which are small and diffuse and persistently elevated beta-HCG with no viable pregnancy. Certainly clinically this is consistent with metastatic choriocarcinoma. In order to obtain a pathologic diagnosis she is going to undergo CT guided needled biopsy of the largest right lung lesion today. In the interim I will discuss the situation with Dr. Gyn/Onc. Certainly if is choriocarcinoma she will begin systemic chemotherapy and I will discuss with him the role of whole brain radiation along with concurrent chemotherapy. Patient's family was not available for discussion today. I will discuss the situation with Dr. Urology and will follow-up ASAP on her pathology report.

Thank you for this consultation.

Radiology Report
12/07/2007

CT Guided Biopsy

Clinical Indication: Lesion in right lung

The patient was placed on the table in the prone position. A grid was placed over the patient's right posterior chest. Axial imaging was acquired through the chest without the use of IV contrast. The area over the mass was marked and sterilely prepped and draped. After administration of a small amount of Lidocaine for local anesthesia, dermatotomy was made and a 4 cm 18 G guiding needle was advanced to the level of the pleural surface. The inner stylet was withdrawn and a 22 G Chiba needle was used for FNA. The specimen was immediately transferred to Pathology for reading. There were adequate cells for diagnosis. The needles were withdrawn, hemostasis obtained. Post biopsy scanning shows small posterior pneumothorax. The patient is asymptomatic.

Successful CT guided FNA of right lung mass with tiny post procedural pneumothorax.

Pathology Report
12/07/2007

Clinical Information: Mass right lung base

Specimen:
FNA mass right lung base (performed in CT main hospital)

Gross Description:
Submitted for microscopic examination is one alcohol fixed Papanicolaou stained smear and one air dried Diff-Quik stained smear.

Microscopic Description:
One Diff-Quik and one Papanicolaou stained smear are received. On the Diff-Quik slide, there are clusters of highly atypical cells with greatly increased nuclear size and distinct nucleoli. Also present is a smaller population of cells with moderately abundant cytoplasm and round to oval nuclei with smooth nuclear contours. Many of the highly atypical cells have distinctly vacuolated cytoplasm. On the Papanicolaou stain, there are also highly atypical cells; some of them multinucleated with greatly increased nuclei and a distinct nucleolus. The chromatin pattern is predominantly vesicular.

Final Diagnosis:
FNA mass right lung base: High-grade carcinoma consistent with choriocarcinoma

Final Tumor Staging Report

Site: Gestational trophoblastic tumors

T: 4b
N: X
M: 2 (poor prognosis, cerebral metastatic, choriocarcinoma)

Group Stage:

Radiology Report
12/20/2007

Hepatic Ultrasound

Clinical Indication: Possible hepatic metastatic disease

Imaging was performed through the abdomen in multiple projections. Aorta and IVC appear unremarkable. The pancreas appears unremarkable. Liver demonstrates no focal lesion with some mild hepatic inhomogeneity, likely reflecting fatty infiltration. Gallbladder has been removed. Common bile duct measures 4 mm. Right kidney demonstrates abnormal complex fluid collection appearing hypoechogenic particularly along the posterior aspect. The right renal collecting system does not appear to be dilated. No focal renal lesion is suspected. The left kidney appears unremarkable. The spleen appears somewhat enlarged. An accessory spleen is suspected.

Complex hypoechogenicity surrounding the right kidney likely reflecting a complex fluid collection. Correlation with CT exam is recommended.

Splenomegaly.

Post operative cholecystectomy.

Radiotherapy Summary

The patient is a 23-year-old female who had presented to the emergency room with severe headache. She was thought to have had an intrauterine pregnancy, but ultimately after a significant hospitalization, workup laparotomy, she was thought to have gestational trophoblastic disease (GTD). Perhaps this was a choriocarcinoma. The headaches were stemming from metastatic lesions throughout the brain, which were causing hemorrhage. The largest one was in the right temporal lobe. At one point, she decompensated and almost had herniation and underwent urgent craniotomy with the findings of acute hemorrhage. Organizing blood clot was removed. The pathologic diagnosis actually ultimately came from a needle biopsy of a right lung nodule. Beta HCG was originally at one point over 80,000. We discussed the role of whole brain radiation for metastatic disease to the brain, which was causing unstable vasculature and intracerebral hemorrhage. The patient initially was with a dense left hemiplegia or paresis, and her mother consented for treatment. She also began EMACO chemotherapy under the direction of Dr. Gyn/Onc. She underwent a CT stimulation with urgent treatment on a Friday and continued on a Saturday. Aquaplast mask was used. She was treated with custom MLC daily. Treatment was as follows:

Fields: #1 and #2
Site: Whole brain
Machine: Varian 6 EX
Energy: 6 MV
Field Arrangement: Opposing laterals
Prescription Reference: 98%
Dose Per Fraction: 2.0 Gy
Total Fractions: 15
Total Dose: 30 Gy
Treatment Start: 12/08/2007 Treatment End: 12/28/2007
Total Elapsed Days: 20

With her chemotherapy, her beta HCG had come down to the 300 range. She was improving. Neurologically, she became much more alert. She had appropriate conversation. Neurologically, she was having recovery with her left upper extremity. Her left lower extremity has still fairly significant neurologic changes at this point. At the end of treatment, she was beginning with alopecia and some scalp erythema.

The plan is to follow-up in one month with an MRI of the brain. I will see her at that time. She continues to house in the rehab unit at this facility. She will continue her chemotherapy.

Radiology Report
12/30/2007

CT of Abdomen and Pelvis with Contrast

Reason for Exam: Metastatic choriocarcinoma

Computerized tomographic images were obtained through the abdomen and pelvis using 5 mm slices obtained in the helical fashion with concurrent administration of 100 cc of Omnipaque 300 contrast. Oral contrast was also administered. Images through the chest base again demonstrate a right lower lobe pulmonary nodule as previously seen on prior CT chest examinations. The liver demonstrates a tiny area of diminished attenuation in the high right hepatic lobe suggesting a cyst. No other focal lesion is seen in the liver. Gallbladder has been removed. The spleen appears at the upper limits of normal in size. Pancreas appears normal. Aorta and IVC appear unremarkable. No periaortic adenopathy is identified. The right kidney demonstrates a complex, low attenuation lesion along the posterior aspect with contour abnormality of the posterior kidney consistent with a subcapsule or perinephric hematoma. This displaces the kidney anteriorly. The left kidney appears normal. The left adrenal gland appears normal. The right adrenal gland is not well visualized. Gastrointestinal tract is partially opacified by contrast and demonstrates no focal abnormality. No pelvic mass is seen. No free fluid is evident. The Foley catheter is in place.

Evidence of right subcapsular or perinephric hematoma.

Tiny probable right hepatic lobe cyst.

Right lower lobe pulmonary nodule again identified.