Food and Drug Administration
Center for Food Safety and Applied Nutrition
Office of Special Nutritionals

ARMS#

12888

5 - SUMMARIES

[redacted]

M.R. UNIT #: [redacted]

DATE OF ADMISSION: 12/25/97
DATE OF DISCHARGE: 12/29/97

DISCHARGE DIAGNOSIS
1. Pontine infarction.
2. Left hemiparesis.
3. Dysarthria.
4. Borderline hypertension.

CONSULTANTS
[redacted] M.D. - Neurology

PROCEDURES
1. Carotid ultrasound: Normal.
2. MRI of the head: Shows right pontine infarct.

PENDING TESTS
1. Serum anti-phospholipid antibody.
2. Angiotensin converting enzyme.
3. Protein S level.
4. Protein C level.
5. Serum protein electrophoresis.
6. Echocardiogram was done and results are pending.

CONDITION ON DISCHARGE
Improved and stable.

DISCHARGE PHYSICAL EXAMINATION
VITAL SIGNS: Blood pressure is 120/76. Heart rate is 79. Respirations are 20. Temperature is 98.9 degrees.
GENERAL APPEARANCE: The patient is alert, awake and oriented. Dysarthria has improved.
NEUROLOGIC: Left arm weakness has improved. Left leg weakness remains significantly poor.

HISTORY OF PRESENT ILLNESS
This is a 41 year old woman who awoke early Christmas morning and had unsteadiness on her feet while walking to the bathroom. She noted some burning in her right eye. She had left-sided numbness and weakness when

PATIENT: [redacted]

MRU#: [redacted] **ROOM:** [redacted]

ACCT#: [redacted]

DISCHARGE SUMMARY

PHYSICIAN: [redacted] M.D.

she presented to . A CT scan was done in the Emergency Room and was reported to be normal. The patient was transferred to where she was seen by Dr.

There is a history of migraine headaches in the past. Neurologic examination showed decreased tone in the left upper and lower extremities and normal tone on the right side of the body. There is no atrophy or fasciculations noted. Strength in the left upper extremity was 2- and 4- in the proximal areas. Strength in the left lower extremity was 3- proximally and 0 distally. Laboratory studies were unremarkable.

COURSE IN THE HOSPITAL
The patient was admitted to the for monitoring. She was started on aspirin. MRI scan showed a right pontine infarct. Occupational Therapy and Physical Therapy were started. The patient is progressing but still is not able to get out of bed by herself. She is able to walk somewhat with a walker with assistance. ANA level was approximately 1:40, which is borderline. The patient is tolerating oral medications. Because of the significant lower extremity weakness, Dr. has recommended stroke rehabilitation at . An evaluation is pending. The patient will be transferred to stroke rehab at or to the to continue physical therapy since it is unsafe for her to go home at this time.

D: 12/29/97 09:47
T: 12/29/97 12:00

M.D.

PATIENT:

MRU#: **ROOM:**

ACCT#:

DISCHARGE SUMMARY **PHYSICIAN:** M.D.

ALLERGIES: **None known.**

M.R. UNIT #: [redacted]

DATE OF ADMISSION: 12/25/97

CHIEF COMPLAINT:
Cerebrovascular accident.

HISTORY OF PRESENT ILLNESS:
This 41-year-old white female was admitted to the hospital with onset of left sided weakness. The patient relates that she felt fine on the day prior to this hospital admission with perhaps the exception of a slight headache. She went to bed last night feeling okay. She awoke at approximately 2 o'clock in the morning and felt that her right eye was burning. She got up to go to the bathroom and noted that she was having trouble with her left side. She seemed to have some difficulty with balance and walking. The patient states that she treated her left eye. She went back to bed and noted that the left side of her body was all numb and tingly and did not feel right. She had her daughter awaken her parents who were there with her. She was brought via paramedics to the [redacted] Emergency Department. She was seen and evaluated at [redacted] Emergency Department. When she arrived there, she was having difficulty with speech. She related that it appeared to be coming and going, at times was fairly strong, at other times was not fluent at all. She continued to note progression of her left sided weakness which became increasingly worse. CT scan was undertake and showed no evidence of hemorrhagic infarction. She was transferred here to [redacted] for further assessment and therapy.

PAST SURGICAL HISTORY:
None.

PAST MEDICAL HISTORY:
Include only a history of fractured leg. No medical illnesses.

CURRENT MEDICATIONS:
None.

PATIENT: [redacted]

MRU#: [redacted] **ROOM:** [redacted]

ACCT#: [redacted]

HISTORY AND PHYSICAL

PHYSICIAN: [redacted] M.D.

HABITS:
Tobacco: Negative. Alcohol: Occasionally drinks.

The patient is gravida 1, para 1-0-0-1, on no birth control. Last menstrual period was three weeks ago.

FAMILY HISTORY:
Positive for cerebrovascular accident on mother's side. Mother had history of angioplasty. One grandfather had cerebrovascular accident. A cousin had Bell's palsy. One uncle had a cerebrovascular accident. One uncle died of myocardial infarction.

SOCIAL HISTORY:
The patient is single. She teaches kindergarten and works for the [redacted] district. She has one 11 year old child.

REVIEW OF SYSTEMS:
HEAD/NECK: She does have a history of migraines. She relates her last really severe migraine was approximately two years ago, but she has associated neurologic phenomenon such as flashing lights There is no history of complicated migraine to include weakness, etc.
LUNGS/CARDIOVASCULAR: She denies history of chest pain or shortness of breath. She does some exercise, though not that regularly.
GASTROINTESTINAL: Negative.
GENITOURINARY: Negative.
MUSCULOSKELETAL: She denies history of joint pain. She has had no complaints of joint pains. No arthritis has been diagnosed.
NEUROLOGICAL: She has had no past history of any neurological complaints other than those associated with her migraine headache which amount of only flashing lights. Specifically, she denies any history of previous episodes of numbness or weakness to speak of.

PHYSICAL EXAMINATION:
GENERAL: Reveals a middle aged female in no acute distress, awake, alert and oriented. She is somewhat anxious.
VITAL SIGNS: Blood pressure 150/85. Pulse 90. Respirations 16. Afebrile.
HEENT: Pupils equal, round, reactive to light and accommodation. Extraocular movements intact. Fundi flat. Tympanic membranes clear. No nasal congestion. Throat clear.

PATIENT: [redacted]

MRU#: [redacted] **ROOM:** [redacted]

ACCT#: [redacted]

HISTORY AND PHYSICAL

PHYSICIAN: [redacted] M.D.

NECK: No adenopathy. No jugular venous distention. Carotids equal without bruits. Neck is supple.
LUNGS: Equal air entry bilaterally. Clear to percussion and auscultation.
HEART: Regular rate and rhythm. S1 and S2 grossly normal. There is a short I/VI systolic murmur heard at the right upper sternal border with no specific radiation.
ABDOMEN: Normal bowel sounds. No hepatosplenomegaly. No masses or tenderness.
EXTREMITIES: Pulses well felt. There is no edema.
CENTRAL NERVOUS SYSTEM: Reveals a marked dysarthria. She has a significant left sided nasolabial fold flattening. The left upper extremity is 0-1 on a scale of 5 strength with marked flaccidity. Left lower extremity shows marked weakness, especially more proximal than distal. She has decreased sensation in her left leg and perceives some decrease in her left upper extremity. Her reflexes on the left are decreased compared to her right.

IMPRESSION:
1. New onset of left sided weakness with marked dysarthria, most consistent with cerebrovascular accident, rule out multiple sclerosis, rule out complicated migraine which is highly unlikely.

PLAN:
The patient will be admitted to the unit and monitored. Neurological consultation will be obtained with further workup to depend on this consultation.

D: 12/25/97 10:50
T: 12/26/97 08:21

M.D.

PATIENT:

MRU#: **ROOM:**

ACCT#:

HISTORY AND PHYSICAL **PHYSICIAN:** M.D.

ALLERGIES: **None known.**

M.R. UNIT #:

DATE OF CONSULTATION: 12/25/97
CONSULTING PHYSICIAN:
ADMITTING PHYSICIAN:

NEUROLOGICAL CONSULTATION

CHIEF COMPLAINT:
Left sided numbness and weakness.

HISTORY OF PRESENT ILLNESS:
The patient is a 41-year-old right-handed white female who went to bed at approximately 12:30 early this morning and then woke up because her right eye was burning. She got up to go to the bathroom at 2:30 in the morning, found that she was unsteady on her feet and felt even more unsteady when she came back to bed. The paramedics were called and she was taken to where head CT scan was performed and was normal. She was then transferred to She said that her left sided numbness and weakness have not really changed since then, and she is having some slurring of her speech as well. There is no previous history of strokes or transient ischemic attacks in the past. She does have a history of migraines going back to approximately age 12, although she has not had problems with migraines recently.

PAST MEDICAL HISTORY:
Significant for elevated blood pressure. There is no history of diabetes or heart problems.

PAST SURGICAL HISTORY:
None.

MEDICATIONS:
None.

PATIENT:

MRU#: **ROOM:**

ACCT#:

CONSULTATION

PHYSICIAN: M.D.

SOCIAL HISTORY:
She does not smoke cigarettes. She has been taking an herbal diet pill. Her last menstrual period was three weeks ago. Periods are regular. She does not take the birth control pills.

PHYSICAL EXAMINATION:
GENERAL: She is a well developed 41-year-old female in no apparent distress.
SKIN: Unremarkable.
HEENT: Intact.
NECK: Supple.
CARDIOVASCULAR: Regular rhythm, S1 and S2. No murmurs. Carotids are 2+ without bruits. Brachial and radial pulses are 2+ and symmetric.

NEUROLOGIC EXAMINATION:
MENTAL STATUS: The patient is alert, oriented x three. She has mild to moderate dysarthria. There is no aphasia.
CRANIAL NERVES: Visual fields are full. Pupils are 4 mm and reactive to 2 mm to light and accommodation. Fundus examination is difficult because of a great deal of refractive error. Extraocular movements are intact. Facial sensation is decreased in the left V1, V2 and V3 dermatomes. She has mild supranuclear facial weakness.
MOTOR: Tone is decreased in the left upper and left lower extremities, is normal on the right side. There is no atrophy or fasciculations. Strength in the right upper and right lower extremity is full. Strength in the left upper extremity is grade 2- distally and grade 4- proximally. Strength in the left lower extremity is grade 3- proximally and grade 0 distally.
SENSORY: She has decreased light touch in the left upper and left lower extremity. Proprioception is intact in all extremities.
COORDINATION: Finger-to-nose is normal with the right hand, could not be done with the left hand.
GAIT: Not tested.
REFLEXES: Reflexes are 2 in both upper extremities. Knee jerks are 3 bilaterally. Ankle jerks are trace bilaterally. There are bilateral Babinskis.

DIAGNOSTIC DATA:
Electrocardiogram is normal.

PATIENT:

MRU#: **ROOM:**

ACCT#:

CONSULTATION **PHYSICIAN:** M.D.

Head CT scan without performed at is normal.

CBC shows hematocrit of 40.7, MCV 90.5, white blood count 8,100, platelet count 364,000. There are 1 basophil, 2 eosinophils, 4 bands, 50 polys, 38 lymphs, 5 monos. Protime INR is 0.97. PTT is 27.

ASSESSMENT:
Probable right cerebral infarct in the internal capsule thalamic area. Complex migraines is a possibility although it seems less probable after this period of time. Demyelinating disease is also of consideration.

PLAN:
Carotid ultrasound and echocardiogram will be scheduled for tomorrow. Westergren sedimentation rate, lipid panel, ANA, serum protein electrophoresis, Lyme's disease titer, angiotensin converting enzyme, protein S, protein C, and pregnancy test will be checked today. Will start one aspirin daily. Agree with cardiac monitoring.

Thank you for consulting me on this pleasant and challenging patient.

D: 12/25/97 13:11
T: 12/26/97 10:03

M.D.

PATIENT:

MRU#: **ROOM:**

ACCT#:

CONSULTATION

PHYSICIAN: M.D.

CHART COPY

CONSENT FOR AND RECORD OF CONSULTATION

Patient Name: _____ Consultant Requested: _____

Reason for Consultation: _____

Date/Time: _____ Date/Time: _____

Doctor _____ Notified Signature: _____ Patient or Authorized Person

Signature: _____ Employee/Staff Member Witness: _____

CONSULTATION

Findings: Dictated

Head CT Scan without Contrast is normal

Diagnosis: Probable (R) Cerebral Infarct vs complex migraine or demyelinating disease

Recommendations: Carotid Ultrasound, ECHO cardiogram
West Sed Rate, Lipid Panel, ANA, SPEP, Lymes Titer
ACE, Protein S, Protein C
Start ASA
Agree with cardiac monitoring

Date/Time: 12/25/97 1300 Signature: [redacted] MD
Consultant

[redacted]

CONSENT FOR AND RECORD OF CONSULTATION

[redacted]

000010

M.R. UNIT #:

DATE OF ADMISSION: 12/29/97
DATE OF DISCHARGE: 01/15/98

DISCHARGE DIAGNOSIS:
1. Brainstem cerebrovascular accident.
2. Dysarthria.
3. Dysphagia.
4. Impaired mobility in self-care activities.
5. History of hypertension in the past now stable without medications.

BRIEF HISTORY UPON ADMISSION:
This is a 41-year-old right-handed female, originally admitted to on 12/25/97 secondary to left-sided weakness and dysarthria. The patient was eventually transitioned to with initial CT scan being negative. Followup MRI study done 12/26/97 showing a right pontine infarct. The patient had secondary declined mobility and self-care activity as well as issues related to speech and was transferred to on 12/29/97.

PHYSICAL EXAMINATION:
The patient is alert. There is left facial droop, dysarthric speech. The patient had left upper extremity weakness, 3-4/5 in strength and left lower extremity weakness 4/5 in strength. Sensory examination to light touch, decreased left side of the body. She required minimal to moderate assist for all mobility and self-care activities.

HOSPITAL COURSE:
1. Rehabilitative program. The patient was involved in an acute rehabilitative program focusing on the above stated areas of mobility and self-care activity, speech and swallowing. It is of note during stay, the patient had progression of neurological deficits with Dr. following closely and multiple diagnostic tests ordered. Diagnostic tests included angiogram, repeat MRI study as well as multiple serology tests as well as lumbar puncture. All tests received prior to discharge to home have been unremarkable with the angiogram showing only slight irregularity of the basilar artery. Because of neurologic deficits, the patient's dysphagia diet had to be downgraded

PATIENT:
MRU#:
ROOM:
ACCT#:
PHYSICIAN: M.D.

DISCHARGE SUMMARY

to initially pureed with thickened liquid by spoon and advanced upon discharge to mechanical soft with thickened liquid by spoon with two video swallows done during stay.

The patient's gait improved to a close, supervised level with front-wheel walker. The patient also improved to a close, supervised level with all self-care activity. The patient's dysarthria did worsen during stay and then slowly improved prior to discharge. The patient's intelligibility of speech, 80-100%. Family training was completed during admission for safe transition home.

During stay, medically, the patient otherwise remained stable. The patient was put on Coumadin per Dr. [redacted] with daily adjustment with dose on January 15, being 5 mg. The patient was sent home with 5 and 2 mg tablets to be adjusted by Dr. [redacted] who is to see the patient in his office tomorrow. The patient's blood pressure remained stable throughout without need of medication. Blood pressure ranged from 105-120 systolic to 70-80 diastolic.

DISPOSITION:
Home.

DISCHARGE FOLLOWUP:
Dr. [redacted] Dr. [redacted]

DISCHARGE MEDICATIONS:
Coumadin, adjusted daily per Dr. [redacted] 5 and 2 mg tablets given.

DISCHARGE THERAPY:
Recommend outpatient PT, OT and speech therapy three times per week.

DISCHARGE EQUIPMENT:
Front-wheel walker, wheelchair.

[redacted]

D: 01/15/98 10:09
T: 01/17/98 11:04
JOB#: [redacted]
cc: [redacted] M.D.

[redacted]

PATIENT: [redacted]

MRU#: [redacted] ROOM:

ACCT#: [redacted]

DISCHARGE SUMMARY

PHYSICIAN: [redacted] M.D.

CC:

M.R. UNIT #:

DATE OF ADMISSION: 12/29/97

HISTORY OF PRESENT ILLNESS:
The patient is a forty-one-year-old right-handed female who was admitted to on Christmas day with left sided weakness and dysarthria. The patient was transferred to The patient's initial head CT scan was negative.

The patient had an MRI done on 12/26/97 showing a right pontine infarct. There is no shift or mass affect. Also, a small left thalamic infarct of undetermined age.

Since admission, the patient says she has had some improvement of her slurred speech and also some increased motor strength in the left lower extremity. The patient has begun physical therapy and occupation at

Apparently the patient denies any difficulty with bowel or bladder. She denies any difficulty swallowing. The patient had been placed on an aspirin per day. She transferred over. The aspirin order was not written for her.

PAST FUNCTIONAL HISTORY:
The patient was quite active. She was independent with all mobilities and activities of daily living prior to admission.

PAST MEDICAL HISTORY:
As above.

MEDICATIONS:
On transfer, aspirin prn, Tylenol prn, Tigan prn.

SOCIAL HISTORY:
The patient stays with her daughter in a two story residence. She is employed as a kindergarten teacher.

PATIENT:

MRU#: ROOM:

ACCT#:

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: M.D.

PHYSICAL EXAMINATION:
GENERAL: The patient is lying in bed in no apparent distress. The patient appears her stated age.
VITAL SIGNS: Temperature 99.21. Vital signs are stable.
HEAD, EYES, EARS, NOSE AND THROAT: Extraocular movements are intact. Visual fields are grossly intact. Head is atraumatic.
LUNGS: Clear to auscultation bilaterally.
COR: Regular rate and rhythm without murmurs, rubs or gallops.
ABDOMEN: Soft, nontender.
EXTREMITIES: Without edema.
NEUROLOGIC: Cranial nerves II-XI show a left facial droop. Her speech is mildly dysarthric. She has decreased shoulder strength on the left.
MOTOR STRENGTH: Right upper and lower extremity 5/5, left upper extremity proximally 4/5, distally 3+/5. Left lower extremity proximally 4/5, distally she has trace ankle movement with some increased tone at the ankle. The right lower extremity 5/5.
REFLEXES: Biceps on the left 3/4, on the right 1/4. Patellar jerks are 3/4 bilaterally. Toes are upgoing bilaterally.
SENSORY: Light touch sensation is decreased on the left upper and lower extremities. Proprioception is intact. Hoffman's is negative bilaterally.
FUNCTIONAL MOBILITY: At this time gait requires minimal to moderate assistance.

IMPRESSION:
1. Brainstem cerebrovascular accident with impaired mobility and activities of daily living.
2. Dysarthria.

RECOMMENDATIONS:
The patient prior to admission lived independently with daughter. She was employed as a school teacher. She has had some neurological improvement. Will benefit from short acute rehabilitation stay for the following: Physical therapy, gait transfers, balance. May need AFO for left lower extremity. Occupational therapy for activities of daily living and adaptive equipment. Clarify with neurology. The patient had been on an aspirin q day. Not transferred over on ASA.

GOALS:
Supervised/mobility in activities of daily living.

PATIENT:
MRU#: ROOM:
ACCT#:
PHYSICIAN: M.D.

HISTORY & PHYSICAL EXAMINATION

ESTIMATED LENGTH OF STAY:
7-10 days.

Thank you for this consultation.

D: 12/30/97 09:04
T: 12/30/97 14:21

PATIENT:

MRU#: ROOM:

ACCT#:

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: M.D.

M.R. UNIT #:

DATE OF ADMISSION: 02/05/98
DATE OF DISCHARGE: 02/10/97

HISTORY OF PRESENT ILLNESS
The patient is a 41 year-old righthanded White female who had suffered two pontine infarcts starting on Christmas day and then one in January of 1998. She had an extensive work up in January of 1998 including MRI scan and a spinal tap, cerebral angiograms and numerous blood tests for vasculitis and hypercoaguable states, all of which were normal. She had been Coumadin as an outpatient and was having improving right hemiparesis. She had been treated at rehabilitation unit. On the morning of admission, she developed more weakness on the left side with some new numbness on the left side and some slurring of her speech.

On admission, general physical examination was normal. She was alert and oriented x 3 and had mildly dysarthric speech without aphasia. On cranial nerve examination, visual fields were full. Pupils were equal, round and reactive. Fundus examination was normal. Extraocular movements were full. Facial sensation was decreased on left side of the face to light touch. The facial strength was good. Her tongue did deviate just slightly to the left with protrusion. On sensory examination, she had decreased light touch in the left upper and left lower extremity. Proprioception and vibration were good. On motor examination, the tone was slightly decreased in the left arm and there was a little spasticity in the left leg. Strength in the right arm was Grade 4 + / 5. In the left arm, the left deltoid was grade 3, biceps 4 - , triceps 4 - , wrist tensors 1 / 5 and flexors 1 to 2 / 5; intrinsic hand muscles were 1 to 2 / 5. In the right leg, the iliopsoas was 4 +, quadriceps 5, hamstring were 4 +, tibialis anterior 5, gastrocnemius 5, toe flexors were 5 and toe extensors were 4 +. In the left leg, the iliopsoas was 3, quadriceps 5, hamstrings were 1 to 2 / 5, tibialis anterior was 1, gastrocnemius was 1, toe flexors were trace and toe extensors were trace. Cerebellar function appeared to be unimpaired and appropriate to the degree of weakness that she had. Reflexes were 3 / 2 bilaterally in the biceps, triceps, brachioradialis and quadriceps. The patient had 5 to 20 beats of clonus of the right ankle and sustained clonus in the left ankle. There was bilateral Babinskis.

PATIENT:

MRU#: ROOM:

ACCT#:

DISCHARGE SUMMARY

PHYSICIAN: M.D.

HOSPITAL COURSE
Head CT Scan without contrast performed in the emergency room was normal. Prothrombin time INR was 2.28.

The patient was started on Aspirin in addition to the Coumadin.

MRI scan of the head was repeated and showed high intensity on T-2 scans in the right more than the left pons without enhancement; there was no mass effect.

A neurosurgery consult was obtained with Dr. who agreed that this did not appear likely to be a tumor. He had suggested CT angiogram but on previous discussions with Dr. ___ it was decided that cerebral angiogram was a better test than a CT angiogram for this the patient's condition.

The patient did have slight improvement in dysarthria as well as her left hemiparesis while in the hospital.

After discussion with the patient and her family, it was decided to seek a second opinion at and she was transferred to the rehabilitation unit at where a second neurologic opinion will be obtained.

Discharge medications: Coumadin 3 mg q.HS; 1 Ecotrin daily; Colace; Tylenol p.r.n.; Restoril p.r.n.; Elavil 25 mg q.HS. I will follow the patient as an outpatient when she is discharged from the rehabilitation unit.

D: 03/14/98 10:58
T: 03/15/98 10:21
JOB#:

PATIENT:
MRU#: ROOM:
ACCT#:
PHYSICIAN: M.D.

DISCHARGE SUMMARY

ALLERGIES: None.

M.R. UNIT #: [redacted]

DATE OF ADMISSION: 02/05/98

REASON FOR ADMISSION
Development of mild increased weakness on the left side yesterday which is worse today.

HISTORY OF PRESENT ILLNESS
The patient is a 41-year-old, right-handed woman who is able to give a good history. The patient's mother and father, who live in [redacted] but have been very devotedly staying here with her over the past month or two, were at the bed side and were able to give valuable additional history.

Mrs. [redacted] has generally been in excellent health except for being under tremendous stress in relationship to a [redacted] that she has been going through over the past six or seven years. On Christmas morning 1997 the patient woke up with some burning in the right eye and noted some numbness and tingling in the left side of her body with weakness on the left side of her body. She was unable to walk.

She went to the Emergency Room at [redacted] was evaluated in the Emergency Room where a CAT scan of the head was unremarkable. She was transferred to [redacted] in the Coronary Care Unit. Extensive evaluation included an MRI scan of the brain which apparently showed a small infarct. The patient had cardiac monitoring which was unremarkable. She slowly improved a little bit and then was transferred to the Rehabilitation Unit at [redacted]. Strength on the left side improved so that she regained her ability to walk.

On about 01/05/98 the patient at about 9:00AM in the morning noted some burning in the left eye and had some right arm weakness and tingling with dysarthria. The symptoms on the left side remained unchanged. She also had some difficulty swallowing. She did not have any word searching difficulties or comprehension problems.

PATIENT: [redacted]

MRU#: [redacted] ROOM: [redacted]

ACCT#: [redacted]

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: [redacted]
M.D.

Evaluation at that time included an MRI scan of the brain that was completely unremarkable. She had angiography done which showed no abnormalities of the carotid or vertebral arteries. Evaluation of the intracerebral vasculature was also unremarkable with no evidence of areas of vasculitis. A lumbar puncture had been done on the patient on 01/05/98. It showed 50 white blood cells with 100% monos. The cerebrospinal fluid protein was 50 and the cerebrospinal fluid glucose 54. The patient has had a variety of studies, looking for evidence of hypercoagulable state, vasculitis, dysproteinemia that have all been unremarkable.

The patient was gradually improving with respect to her ability to walk and swallow until yesterday morning when she woke up and noted that her vision was off so that it looked to her as if she was looking in "funny mirrors, as in a fun house, at a county fair" regardless of whether she covered one or the other. The symptoms lasted about two hours and then resolved. When she woke up, she not only had the vision problem but she also noted a little bit of increased weakness in the left arm and left leg. The tingling that had been present ever since Christmas day was unchanged. She came to the Emergency Room and had a CAT scan of the head that was unremarkable and then was discharged to home. The patient has been on Coumadin with therapeutic protimes over the past several weeks.

This morning the patient woke up and had increased weakness on the left side. She has been able to walk but just barely using a walker. She has not had any vision problems at all today. She came to the Emergency Room and I was called and we have decided to admit the patient.

The patient has a history of intermittent migraine headaches since she was 12 years old. Menarche occurred at age 14. The patient over the past ten years or so has had headaches of a fairly mild degree, almost every day or every other day. She said that she had severe headaches which she calls migraines, on an average about twice a year. There is no family history of significant headaches. The patient has never previously had any vision problems or other neurological problems with her migraines.

The patient's menstrual cycle may be important with respect to her current difficulties. She had a period in early December. She was just about to start a period in early January when she had her second episode

[redacted]

on 01/05/98. She is now just about two days before her expected period is to start.

REVIEW OF SYSTEMS
The patient has not had any recent fevers, chills, chest pain, palpitations, nausea, vomiting, or diarrhea. She has not had any significant headache with any of the above episodes over the past couple of months.

PAST MEDICAL HISTORY
MEDICAL: Significant only as above for the episodes of neurological dysfunction.
SURGICAL: Tonsillectomy at age 8. She had a left leg fracture five or so years ago which did not require surgery.
MEDICATIONS: Coumadin which the patient has been taking, a dosage of 3 mg alternating with 2 mg a night; tonight is due to be a 2 mg night. Colace.

SOCIAL HISTORY
The patient does not smoke cigarettes. She does not drink alcohol very often but only on rare occasion. She does not use any elicit drugs such as cocaine. The patient has never taken phen-fen but took a "natural herb" called "Diet Phen" in October/November of this year; we don't know exactly what is in that preparation. As noted above, the patient is currently [redacted]

[redacted] Arrangements were made for the patient's

PATIENT: [redacted]

MRU#: [redacted] ROOM: [redacted]

ACCT#: [redacted]

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: [redacted]
M.D.

[redacted]

daughter to see the paternal grandparents who live in [redacted] during January and this apparently come off uneventfully.

Not only recently, but over the past several years the patient has been under extraordinary stress related to all of this.

FAMILY HISTORY
The father is alive at age 69 with a history of hypertension. Mother is alive at age 65 with a history of hypertension. She had coronary artery stent placed a few years ago.

PHYSICAL EXAMINATION:
GENERAL APPEARANCE: Mrs. [redacted] is a pleasant, well-developed, well-nourished and cooperative woman in no apparent distress at rest.
SKIN: Unremarkable.
HEAD, EYES, EARS, NOSE AND THROAT: Normal.
NECK: Supple. Carotid arteries are full without bruits.
HEART: Regular rate and rhythm. No murmurs.
CHEST: Clear.
ABDOMEN: Benign.
EXTREMITIES: Unremarkable.

NEUROLOGICAL EXAMINATION
MENTAL STATUS: The patient is alert and fully oriented. Speech is mildly dysarthric but easily understandable. Language function itself is completely normal. Recent and remote memory are excellent. Cognition and abstraction are good. Towards the end of the interview and examination, the patient understandably became quite emotional as she contemplated the difficulty she has been experiencing. She is anxious to return to work on 03/01/98 and became upset at the thought that she might not be well enough to do this.
CRANIAL NERVES: Visual fields are full to confrontation and finger counting. The pupils are equal, round, and reactive to light. On funduscopic examination it is obvious that the patient is very myopic. No abnormalities were noted in the fundi. Extraocular movements were full without ptosis, nystagmus, or dysconjugacy. The facial sensation was slightly decreased on the left side to touch. Pin was good on both sides of the face. Temperature was normal on both sides of the face. Muscles of facial expression moved with good power and symmetry. Muscles of mastication were strong. The lower cranial nerves all moved normally except that the tongue may have deviated just slightly to the left on protrusion.

[redacted]

SENSATION: Sensation is decreased on the left face, arm, and leg to touch. The touch sensation is most pronounced distally in the leg. Pin prick is slightly decreased distally in the left leg. Temperature is good throughout. Position and vibration are good in the great toes on both sides. Romberg's was not tested.
MOTOR: Muscle bulk is normal. Tone is perhaps slightly decreased in the left arm. There is a little bit of spasticity in the left leg. Power testing shows that deltoids, biceps, triceps, brachioradialis, wrist extensors, wrist flexors, intrinsic hand muscles are all 4+/5 in the right arm. In the left arm, the deltoids are 3/5, biceps 4-/5, triceps 4-/5, wrist extensors 1/5, wrist flexors 1-2/5, and intrinsic hand muscles 1-2/5. In the right leg, the iliopsoas is 4+/5, quadriceps 5/5, hamstrings 4+/5, tibialis anterior 5/5, gastrocsoleus 5/5. The toe flexors are 5/5 and toe extensors 4+/5. In the left leg, the iliopsoas is 3/5, quadriceps 5/5, hamstrings 1-2/5, tibialis anterior 1/5, gastrocsoleus 1/5. The toe flexors just barely move and toe extensors just barely move.
COORDINATION: Fine coordination and cerebellar coordination are impaired proportionate to the weakness.
GAIT: Not tested.
REFLEXES: The deep tendon reflexes are about 3/2 bilaterally in biceps, triceps, brachioradialis, and quadriceps. The patient has between 5-20 beats of clonus in the right ankle. She has infinite clonus in the left ankle. Both plantar responses are extensor.

LABORATORY DATA
CT scan of the without contrast done today is unremarkable. The patient's protime INR today is 2.28. The PTT is 50.8 seconds. Her white blood cell count is 7,600 with 78 polys, 17% lymphs. Hemoglobin is 15.1 with essentially normal red cell indices. The platelet count is 237,000. Her electrolytes are essentially normal. Glucose is 97. BUN is 9 with a creatinine of 0.6. Calcium is 9.3. CPK is normal at 76. Liver function tests are normal. Magnesium is reported to be extraordinarily low at 0.2.

IMPRESSION
Mrs. [redacted] presents with an extraordinarily difficult clinical picture which basically can be summarized as having one episode of left-sided weakness and numbness on 12/25/97, a second episode of right-sided tingling and numbness involving the arm and causing some dysarthria on about 01/05/98, and a third episode of some mild weakness yesterday on the left side with some increased weakness today on the left side.

PATIENT: [redacted]

MRU#: [redacted] ROOM: [redacted]

ACCT#: [redacted]

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: [redacted]
M.D.

Extensive evaluation including MRI scan, angiography, and a variety of blood tests have been unrevealing. The patient's cerebrospinal fluid showed 50 white blood cells, all of which were mononuclear cells. I can't get the results out of the computer and I don't have her old chart available so I don't know if the multiple sclerosis studies on the spinal fluid were unremarkable or not. The patient has been on Coumadin and has a therapeutic protime at this time which obviously did not present this episode.

The patient has a history of fairly chronic headaches with a history of severe "migraine" headaches about twice a year. The possibility that these are migrainous episodes is to be considered, especially in light of the episode yesterday where the patient woke up with binocular visual impairment, which looked to her as if she was seeing mirrors in a fun house. I think the neurological localization for this lesion is somewhat remote from that causing her left sided weakness and numbness which raises the possibility that the patient might have a multifocal process such as migraine. However, this, of course, is a diagnosis of exclusion. The patient did have 50 white blood cells in her spinal fluid which may have been due to the infarct that she suffered before. I am not sure if this relates to anything significant that might be going on.

With respect to the possible diagnosis of migraines, it is interesting to note that the patient's second episode and the current episode have both occurred within a day or two of her expected menstrual period. The first episode occurred after her period, at a time of extraordinary psychological stress as detailed above.

The patient's episodes have clearly not been prevented by use of Coumadin by itself. I talked with the patient, her father, and her mother about adding aspirin to the Coumadin and I explained to them the risk of bleeding from this. Together we decided to accept this risk because of the potential gain of preventing further neurologic deterioration.

RECOMMENDATIONS
1. I will add an aspirin to the patient's Coumadin.

PATIENT:

MRU#: ROOM:

ACCT#:

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN:
M.D.

[redacted]

2. Dr. [redacted] will be available again tomorrow to resume care for this patient as he has been doing over the past couple of months. I have explained this to the family.

[redacted]

[redacted]

D: 02/05/98 19:13
T: 02/06/98 09:03

[redacted] M.D.

PATIENT: [redacted]

MRU#: [redacted] ROOM: [redacted]

ACCT#: [redacted]

HISTORY & PHYSICAL EXAMINATION

PHYSICIAN: [redacted]
M.D.

[redacted]

M.R. UNIT #: [redacted]

DATE OF CONSULTATION: 02/07/98
CONSULTING PHYSICIAN: [redacted]
ADMITTING PHYSICIAN:

NEUROSURGICAL CONSULTATION

The presenting problem is that of sudden onset of left sided weakness two days ago.

PAST MEDICAL HISTORY:
About a month ago, the patient had a similar episode of left sided weakness and this was followed a short time later by right sided weakness. She was in rehabilitation, doing very well, was walking and had recovered quite nicely from these episodes until a couple of days ago when she suddenly developed this weakness again.

After the first episode in December, she had numerous studies including MRI and angiograms, including vertebral angiograms, which revealed some ischemia in the brain stem, but no other abnormalities. Since this episode, she has had another MRI with contrast and it again reveals ischemia in the brain stem, but no definite evidence of any mass lesion.

The patient has a family history of vascular problems with her mother having coronary artery disease and some other family members dying from heart attacks, but she has had no problems prior to this and her cholesterol and other chemistries have been normal, and she hasn't had any hypertension.

NEUROSURGICAL EXAMINATION:
Cranial nerves are intact, except there is a little weakness of the buccinator muscle on the left as compared with the right.

There is weakness and some hyperreflexia on the right side as compared to the right side. There is a pathological toe sign on the left.

Cerebellar function is not performed well on the left because of weakness. Basal ganglia functions appear to be intact.

PATIENT: [redacted]

MRU#: [redacted] **ROOM:** [redacted]

ACCT#: [redacted]

CONSULTATION **PHYSICIAN:** [redacted] M.D.

DISCUSSION:
I discussed this situation with Dr. [redacted] and this patient probably has atherosclerosis of the basilar artery. However, to be on the safe side, I would again do an angiogram; actually, I would only do a CT angiogram rather than going through the entire angiogram procedure she had before, and if there is any lesion in the brain stem, it really should show up on this.

I doubt if it is going to show anything, but just to be on the safe side, I think that I would take this one additional precaution.

Unfortunately, there is not a whole lot to do for this patient. She keeps having these episodes and probably will have a massive one one of these days that will end her life.

IMPRESSION:
Repeated episodes of ischemia in the brain stem.

RECOMMENDATIONS:
A CT angiogram with emphasis on the brain stem vertebral artery circulation.

Thank you for allowing me to see this very interesting patient for neurosurgical evaluation.

[redacted]

D: 02/08/98 11:34
T: 02/09/98 11:40

[redacted]

PATIENT: [redacted]

MRU#: [redacted] ROOM: [redacted]

ACCT#: [redacted]

CONSULTATION

PHYSICIAN: [redacted], M.D.

M.R. UNIT #:

DATE OF CONSULTATION: 02/09/98
CONSULTING PHYSICIAN:
ADMITTING PHYSICIAN:

HISTORY OF PRESENT ILLNESS:
I thank you for the opportunity to see Miss who is a pleasant forty-one-year-old Caucasian female, well known to me from prior admissions who is now admitted for acute onset of left sided weakness with increasingly slurred speech and difficulty with mobility and self care activity.

Upon admission, the patient has undergone repeat of extensive diagnostic testing with diagnosis of new right pontine cerebrovascular accident with corresponding left hemiparesis and bulbar involvement.

PAST FUNCTIONAL HISTORY:
The patient prior to his admission, had improved tremendously to the point where she was completely independent without need of assistive device and was preparing to go back to work as a school teacher in March, 1998. The patient now has had a pre-gait level of ambulation with physical therapy less than 10 feet, requiring assistance of one person and assistive device as well as continued issues of dysphagia <_____> thickened and dysarthric decreased intelligibility of speech, paresis of the upper extremities, especially has continued with severe paresis and decreased functional use.

CURRENT MEDICATIONS:
The patient was discharged on Coumadin. Since admission, she is now on aspirin as well.

PAST MEDICAL HISTORY:
The past medical history is significant for prior admission for initially acute left sided weakness with subsequent episodes of right sided weakness as well as with dysarthria and dysphasia. The diagnosis at that time was of a cerebrovascular accident in the pontine area.

SOCIAL HISTORY:
The patient is a single parent with children. She is a school teacher. She has a very supportive family, parents are in town helping patient at

PATIENT:
MRU#: ROOM:
ACCT#:
PHYSICIAN:
M.D.

CONSULTATION

home. Discharge plans are back to the home environment and eventual early reintegration back into the work force.

FAMILY HISTORY:
Non-contributory.

REVIEW OF SYSTEMS:
Currently primary complaint is of persistent left sided weakness, slurred speech, difficulty swallowing.

PHYSICAL EXAMINATION:
GENERAL: This is a well-developed, well-nourished female lying supine in acute distress.
VITAL SIGNS: Temperature 97.6. Pulse is 67. Respiratory rate 20. Blood pressure 116/78.
HEAD: Atraumatic, normocephalic. Facial droop noted on the left.
EYES: Extraocular movements are intact.
FACE: Face is symmetrical.
MOUTH: Tongue midline.
NECK: Neck is supple.
LUNGS: Clear to auscultation.
HEART: Regular rate and rhythm.
ABDOMEN: There are normal active bowel sounds, non-tender.
EXTREMITIES: Normal tone, mildly decreased left upper extremity. Range of motion within functional limits, no pain. No shoulder subluxation. No clubbing, cyanosis or edema of the lower extremities.

NEUROLOGICAL EXAMINATION:
MENTAL STATUS: The patient is alert and oriented. She is following all commands consistently. Good short term/long term memory. Good safety awareness.
CRANIAL NERVES: Examination shows deficits in cranial nerve VII with facial asymmetry, XI and X with dysarthria and dysphasia.
MOTOR: Examination shows left hemiparesis, in the upper extremity 2/5, lower extremity 3-4/5 with severely decreased fine motor coordination, rapid alternating movements.
SENSORY: Examination is intact to light touch and proprioception.
FUNCTIONAL EXAMINATION: Functionally she is presently at a minimal assist for bed mobility and transfers. She is requiring 25-50% assist for self care activities and she ambulates less than 10 feet at pre-gait level with ambulatory assistive device and verbal cues with difficulty utilizing left lower extremity.

IMPRESSION:
1. New acute right pontine cerebrovascular accident with corresponding left hemiparesis.
2. Dysarthria.
3. Dysphasia.
4. Declined mobility and self care activity.

DISCUSSION AND REHABILITATION PLAN:
The patient is an excellent candidate for acute rehabilitative unit with secondary need in all three disciplines with endurance for bid treatment with good prognosis of functional gains for discharge home back with family.

GOALS FOR ADMISSION:
The team will consist of physical therapy, occupational therapy and speech pathology on a bid basis, striving towards goals to achieve close supervision with assistive device in all activity levels. Also, to be involved in dysphasia program, monitoring thickened liquids as far as quantity and safety with possible repeat video swallow study. Also, the patient is to continue on all motor exercises for dysarthria with speech therapy, especially as this is the most critical factor in her returning to the work force.

Can accept when medically clear and stable by Dr. [redacted] and authorization obtained.

DISPOSITION:
To home.

PROGNOSIS:
Prognosis for functional gains is good.

ESTIMATED LENGTH OF STAY:
Estimated length of stay to be determined on first team conference.

Thank you again for the opportunity to see Mi[redacted]

[redacted]
D: 02/09/98 08:55
T: 02/10/98 05:40

ORIGINAL

PATIENT: [redacted]
MRU#: [redacted] ROOM: [redacted]
ACCT#: [redacted]
PHYSICIAN: [redacted]
M.D.

CONSULTATION

DATE OF ADMISSION: 02/10/98

DATE OF DISCHARGE: 02/26/98

REASON FOR HOSPITALIZATION:

This 41-year-old female, kindergarten school teacher was submitted for inpatient rehabilitation following a pontine stroke with left hemiparesis (left upper extremity weakness greater than left lower extremity) on February 5, 1998, after transient visual loss on February 4, 1998 and two prior ischemic episodes with pontine infarct on MRI.

Initial event of left hemiparesis began on December 25, 1997, then right hemiparesis on January 5, 1998, each time with transient eye symptoms.

The patient reports a history of migraine headaches, but none over the last two years. She has had much social stress with the holidays and family, regarding custody conflict of her daughter.

Workup at the other facility included a MRI, which showed a pontine infarct; an angiogram, four vessel, questionable irregularity of the basal artery; negative anticardiolipin antibodies; ANA had low titer 1:40 ratio; negative rheumatoid factor and RPR. Duplex of the carotids at the other facility was reportedly negative.

The patient has been treated with Coumadin in January of 1998 and had been on this when in February another stroke occurred.

Thus, the patient was admitted to acute rehabilitation for further evaluation and further therapy to increase her functional mobility, speech and activities of daily living.

FINDINGS ON ADMISSION:

Please refer to Dr. [redacted] dictated history and physical.

LABORATORY FINDINGS:

On February 26, 1998, sodium 135, potassium 3.9, chloride 100, bicarb 19, glucose random 96, BUN 17, creatinine 0.5.

On February 22, 1998 total protein was 6.6, albumin 4.3, uric acid 4.3, calcium 9.3, phosphorus 3.1, bilirubin total 0.3, cholesterol 212, alkaline phosphatase 70, AST 9, ALT 8, LDH 121, magnesium 2.1.

February 19, 1998, cholesterol 213, triglycerides 177, HDL cholesterol 57.4, E-LDL 35, LDL-C 120.

February 26, 1998, WBC 14.8, RBC 4.48, hemoglobin 13.4, hematocrit 40.0, MCV 89, MCH 29.9, MCHC 33.5, RDW 12.3, platelet count 347, MPV 7.9, segs 82%, bands 2%, lymphocyte 10%, monocytes 6%, eosinophils 0, basophils 0, platelet estimate normal, RBC morphology normal.

Sedimentation rate on February 11, 1998 was 10; PTT was 49.7.

Urinalysis on February 22, 1998, appearance was slightly hazy, color was yellow, specific gravity was 1.025, pH 6.0, leukocytes esterase negative, nitrates negative, protein negative, glucose negative, urobilinogen negative, ketones negative, bilirubin urea negative, blood negative, squamous epithelial 0-2, WBC 0-2, RBC 0-1, bacteria moderate.

Cerebral spinal fluid on February 18, 1998, volume 2 ml, color was colorless, clarity was clear, supernatant was colorless, WBC count 21, RBC count 0, polymorphonuclear 0, mononuclear 100%, CSF protein 58 mg/dL, glucose 59 mg/dL.

Cerebral spinal fluid on the same day, February 18, 1998, volume 1.5, color was colorless, clarity was clear, supernatant was colorless, WBC count 19, RBC count 1, polymorphonuclear 1, mononuclear 100%.

Gram stain and preparation of AFB culture on February 18, 1998, no acid-fast bacilli seen.

Cerebral spinal fluid culture with gram stain on February 18, 1998, final report was no growth at seven days.

February 18, 1998, Varicella-zoster virus IgG antibody of cerebral spinal fluid 0.88. EIA value factor V: mutation not detected. APC resistance profile: PTT 41 seconds, PTT 1:1 ml 35 seconds. APC resist PTT based: 1.14. APC resist PT based: not applicable. Von Willebrand: AG 15% normal, reference range 60-150% normal. Homocystine 8.1 nmol/ml. Antithrombin III activity 114% of normal 81:123. ANA pattern homogeneous: ANA antibodies titer result was 1:180. Angiotensin I-converting enzyme was 5. Protein C activity 58, protein S activity 43. VDRL of the cerebral spinal fluid was non-reactive. Cardiolipin IgA antibodies was less than 10; cardiolipin IgG antibodies was less than 10; cardiolipin IgM antibodies less than 10.

Radiology studies:

February 12, 1998, interpretation of outside film, cerebral angiogram by Dr. [redacted] Impression: focal areas of narrowing within the basilar artery, vascular spasm of vasculitis versus atherosclerotic vascular disease.

MR angiogram performed February 17, 1998. Impression: no flow seen in the mid to distal basilar artery consistent with basilar artery occlusion, etiology may be thrombotic event versus dissection.

February 18, 1998, cerebral angiogram. Impression: complete occlusion of basilar artery with tapered end. Focal collection just proximal to complete occlusion with tapered superior and inferior ends. Irregularity of midportion of basilar artery just proximal to the anteroinferior cerebral artery origin. These findings are consistent with complete occlusion, possibly secondary to a thrombolic event versus a dissection.

Other tests:

Two-dimensional echocardiogram performed on February 11, 1998, there is no mitral regurgitation, trace tricuspid regurgitation was noted. There is no evidence of aortic regurgitation. There is no evidence of valvular stenosis. An intracardiac shunt was not seen. Conclusion: No intracardiac masses seen.

HOSPITAL COURSE:

This 41-year-old female was admitted to acute rehabilitation, transferred from [redacted] in [redacted] Upon admission to the Rehabilitation Unit, the patient was managed on Coumadin and aspirin for the pontine infarct, which was diagnosed at the other facility. Coumadin management was continued until February 16, 1998, when it was discontinued. Aspirin was continued until February 18, 1998, when this was discontinued, and heparin was started. The heparin was continued until February 20, 1998, where the patient was then started on Lovenox 30 mg subcutaneously b.i.d. The Lovenox was then continued until February 25, 1998, when there was a change in the patient's status, and heparin was restarted.

During the patient's rehabilitation stay, she was seen by physical therapy, occupational therapy, and speech therapy. The patient was making very good progress up until February 26, 1998, when the patient began to have additional neurological symptoms; and therapy was discontinued, and the patient was transferred to the Intensive Care Unit.

Upon admission to the Rehabilitation Unit, neurology was consulted, as well as the stroke service. The patient's history was reviewed, as well as several procedures which took place, including an MRA and a cerebral angiogram. The patient's former medications and components of a diet pill were reviewed by the physicians and the pharmacy. One of the previous medications that the patient had been taking was diet Fen-Phen. The contents of

this medication were reviewed, and adverse effects of this medication were noted by the physician. On review of the MRA, as well the cerebral angiogram, the patient was discovered to have a basilar vasculitis. Thus, the patient was started on Solu-Medrol intravenously times five days, which is to be later tapered off over a period of four weeks. The patient was also to resume Coumadin orally for anticoagulation effect.
Dr. [redacted] was consulted with regards to the patient's new disorder, which was determined to be secondary to her cerebrovascular accident and steroid use. His recommendation was to start the patient out on SSRI mediation prior to discharge.

On February 23, 1998, the patient was improving overall in speech, with the increased dysarthria; but on February 26, 1998, additional neurological symptoms were noted. The patient had complained of a pain in the back of her neck. She had numbness in her mouth and tongue, and blurring of her left eye. She also had severe dense expressive aphasia.

At this point, it was determined that the patient should leave the Rehabilitation Unit and be admitted to the Intensive Care Unit for further evaluation of these symptoms. The patient was transferred to the Intensive Care Unit and discharged from rehabilitation.

DISCHARGE INSTRUCTIONS:

Follow-up: The patient was discharged and transferred to the Intensive Care Unit for further medical followup regarding the change in her neurological status. Please refer to the new admission to the Intensive Care Unit for further details of the patient's hospitalization stay at [redacted]

DISCHARGE DIAGNOSES:

1. Pontine stroke with left hemiparesis (left upper extremity greater than left lower extremity) on February 5, 1998 after

transient visual loss and two prior ischemic episodes with pontine infarct on MRI.

2. Basilar artery vasculitis.

3. History of migraine headaches.

[redacted] M.D.

DICTATED BY [redacted]

[redacted]

D 03/27/98
T 3/28/98
[redacted]

DATE OF ADMISSION: 02/26/98

DATE OF DISCHARGE: 03/06/98

REASON FOR HOSPITALIZATION:

This 41-year-old female was admitted to ICU on February 26, following complaints of pain in the back of her neck, numbness in her mouth and tongue, and blurred vision in her left eye. She also demonstrated severe dense expressive aphasia.

This patient was initially transferred from [redacted] in [redacted] under the care of Dr. [redacted] and admitted to acute inpatient rehabilitation following a stroke on February 5, 1998, with a prior stroke on December 25, 199_. She was referred to [redacted] by Dr. [redacted] fcr rehabilitation and further evaluation and workup of her most recent history of right pontine infarct. The patient has been followed by the [redacted] since her admission to the rehabilitation service.

She had been progressing fairly well with the rehabilitation program until she began having increased neurological symptoms on February 26, 1998. The patient completed a five-day course of Solu-Medrol and began a tapering dose.

The patient is currently acutely ill and is being transferred to for the change in her neurological symptoms and for acute medical care regarding her stroke.

PERTINENT FINDINGS ON ADMISSION:

Please refer to Dr. [redacted] dictated History and Physical.

PERTINENT LABORATORY FINDINGS:

March 6, 1998: Sodium 138, potassium 3.9, chloride 98, bicarbonate 24, glucose random 109, BUN 22, creatinine 0.5. WBC 19.3, RBC 3.86, hemoglobin 11.7, hematocrit 34.9, MCV 90, MCH 30.4, MCHC 33.6, platelet count 286,000. Prothrombin time 9.9, INR 0.88, PTT 41.7.

Urinalysis on February 27, 1998, slightly hazy, straw color, specific gravity 1.015, pH 6.0, leukocyte esterase negative, protein negative, nitrates negative, glucose negative, urobilinogen negative, ketones negative, bilirubin urea negative, blood trace, squamous epithelial 0-3, WBC 0-2, RBC 4-6, bacteria few.

Urine culture, final report, 40,000 Staphylococcus feces, coagulase negative. Anti-factor XA 0.0.

Care panel: Triglycerides 168, cholesterol 245, HDL cholesterol 73, LDL cholesterol 138, cholesterol HDLC ratio 3.36, serum clear, chylomicrons none detected, lipid phenotype normal. Ristocetin cofactor 106%, reference range >50.

Varicella Zoster virus IgG AB of CSF 0.88.

Radiology: Portable chest x-ray March 4, 1998, lungs remain clear, no evidence of infiltrates, nodules or effusions. Cardiac silhouette, pulmonary vasculature, and mediastinum are normal size and configuration. The visualized bony skeleton is intact. Impression: No acute cardiopulmonary process evidenced radiographically. No interval change.

Portable chest March 3, 1998. The heart and pulmonary vascularity are within normal limits, and the lungs are clear of acute infiltrates, and no significant change since February 28, 1998. Impression: No evidence of edema or pneumonitis, with no significant change.

CT scan of the chest with intravenous contrast: Porous spaces in lungs are clear. There is no pleural effusion, no infiltrate, no pulmonary nodules. There is good opacification of the superior vena cava without evidence of thrombus. Impression: Normal radiographic examination of the chest. No evidence of superior vena cava thrombosis.

CT scan of the brain, February 26, 1998: Impression: Right pontine infarct in the same region of abnormality seen on prior MRI scan. No density and pure left belly of pons, suggesting acute low density anterior left belly of pons, suggesting acute infarct not seen on prior MRI scan.

MR angiogram, February 26, 1998: Impression: Significant interval decrease in amount of flow, distal vertebral arteries and basilar artery compared with prior examination from February 17, 1998. This suggests occlusion of the basilar and distal vertebral arteries, possibly secondary to vasculitis.

MRI of the brain, February 26, 1998: Impression: Acute infarct left side of pons. New, when compared with prior examination from February 6, 1998. No significant interval change in old infarct, right side of pons. Absence of flow void in basilar arteries, suggesting occlusion.

HOSPITAL COURSE:

This 41-year-old female was transferred from the rehabilitation unit to the ICU after having a CT scan of the head. The patient was placed n.p.o. except for medications initially. A Foley was inserted to close drainage and the patient was started on heparin IV, initially 950 units per hour. The pharmacy to continue to monitor this dosing according to pharmacy protocol. Patient was also started on IV fluids, D5 half normal saline with 20 mEq of potassium chloride, running at 50 cc per hour. IV Pepcid was started at 20 mg IV every 12 hours, and IV Solu-Medrol was initiated, 32 mg IV every 24 hours.

The patient was taken to the ICU. It was decided initially to make her n.p.o., complete bedrest. An MRA, as well as an MR of the brain was to be performed. The patient was started on a dopamine drip on February 26, 1998, in order to maintain her blood pressure. A TLC placement was performed on the same day into the left groin in order to start the dopamine drip.

The dopamine drip was later tapered off on February 27, 1998. The patient was started on Florinef on February 27, 1998, in order to help with blood pressure maintenance as a result of orthostatic hypertension. The patient was also then started on aspirin, and this was to be given crushed orally with applesauce, as the patient was also to begin a dysphagia one diet with honey thick juices, and to maintain swallowing precautions, doing a chin tuck for every swallow of liquids.

The patient was also sent for a duplex study of the superior vena cava. Please refer to results. Also, a CT of the chest was performed. The Doppler study of the superior vena cava was later discontinued, and the CT chest was performed in order to rule out superior vena cava thrombosis. The results are documented in this Discharge Summary, included narrow vena cava thrombosis.

The patient was maintained on a heparin drip and monitored by the pharmacy, based on pharmacy protocol, in order to maintain a PTT range of 1.75 to two times control.

On March 2, 1998, neurology had ordered transcranial Dopplers to be performed daily X 5 days. Please refer to the documented results in the chart.

The patient was transferred to the DOU on March 2, 1998, with Solu-Medrol at 32 mg IV in 24 hours to continue, as well as Florinef 0.1 mg b.i.d., and IV fluids D5 half normal saline with 20 mEq potassium chloride at 50 33 an hour. The patient was placed on strict bedrest between 10:00 o'clock in the evening and 6:00 o'clock in the morning.

The patient's dysphagia diet was progressed to Dysphagia II with nectar consistencies for liquids, and continued to use a chin tuck for strategies of swallowing liquids. Patient was also advanced to Ensure shakes for nutritional supplement.

On March 4, 1998, the Solu-Medrol was changed to 16 mg IV every 12 hours, with continuance of Florinef 0.1 mg b.i.d., heparin IV for

anticoagulation, and also started on antioxidant formula vitamins, as well as Prozac 20 mg daily. The patient was also advanced with physical therapy to ambulate, and for occupational therapy and speech therapy to provide additional therapy on a daily basis. The patient's orthostatic blood pressure was monitored twice a day.

Dopamine drip was discontinued on March 5, 1998. Heparin continued to be infused, as well as Solu-Medrol. The Solu-Medrol was decreased to 12 mg IV q.12 hours on March 5, 1998.

Because of the patient's progression in therapies, as well as medical stabilization, the patient was transferred back to the rehabilitation unit on March 6, 1998, for continued physical therapy and treatment of her recent stroke. The patient will continue to be monitored by the neurology service, as well as the rehabilitation staff, and Solu-Medrol will be tapered, as well as the Florinef continued for orthostatic hypertension, and the patient will continue to advance with therapy.

Thus, the patient was discharged from [redacted] and transferred to the rehabilitation unit on March 6, 1998.

DISCHARGE INSTRUCTIONS:

Medications:

1. Pepcid IV 20 mg every 12 hours.
2. Aspirin 325 mg a day, crushed in applesauce.
3. Florinef 0.1 mg b.i.d.
4. Ensure 240 ml three times a day.
5. Prozac 20 mg daily, in the morning.
6. Antioxidant vitamins, one capsule daily.
7. Solu-Medrol 12 mg every 12 hours.
8. Heparin infusion at 850 units per hour, to be monitored by pharmacy per their protocol.

Follow-up: The patient will continue to be followed by the rehabilitation staff as well as the neurology stroke service staff for continuation of medical management and rehabilitation, on the rehabilitation unit at [redacted]

FINAL DIAGNOSES:

1. Propagation of basilar artery clot, occlusion of entire basilar artery and both proximal and distal vertebral arteries, with new ischemia and edema in the left mid pons.
2. Right pontine stroke, with left hemiparesis, February 5, 1998.
3. Basilar artery vasculitis.
4. History of migraine headaches.

[redacted], M.D.

DICTATED BY [redacted]

[redacted]
D 04/21/98
T 4/22/98
[redacted]

DATE OF ADMISSION: 2/10/98

IDENTIFICATION:

Forty-one-year-old right-handed schoolteacher is admitted for inpatient rehabilitation of a pontine stroke which was occurring on February 5, 1998, when she presented with transient visual loss and left-sided weakness.

This followed two prior ischemic episodes, the initial December 25, 1997, involving left hemiparesis and subsequently a right hemiparesis less than two weeks later on January 5, 1998. Each time, she had transient eye symptoms.

Although, there was a remote history of migraine, there was none in the past two years and the patient had been under much stress during the holiday time regarding a custody conflict for her 11-year-old daughter.

The patient had been worked up extensively at the outside facility with magnetic resonance imaging which had demonstrated a pontine infarct, and a four-vessel angiogram was showing some questionable irregularity of the basilar artery. ANA was low titer 1-40, and the anticardiolipin antibodies were negative as were the rheumatoid factor and the RPR, and the carotid duplex study was also negative.

The patient had been started on Coumadin in January of 1998, and was on Coumadin at the time of the stroke on February 5, 1998.

The patient had been previously healthy with no chronic illnesses, and she worked full time as a kindergarten teacher prior to the stroke December 25, 1997.

Additional studies that were done included workup for multiple sclerosis with myelin basic protein less than 1 in the cerebrospinal fluid, and the patient had no oligoclonal bands detected in the cerebrospinal fluid and the gamma globulin synthesis was not increased. Myelin Cryptococcus antigen on the cerebrospinal fluid was also negative.

PAST MEDICAL HISTORY: No serious illnesses.

ALLERGIES: None.

MEDICATIONS:

Coumadin 3 mg q. p.m., Ecotrin 325 mg daily, Elavil 25 mg at hs, and Restoril 35 mg at hs.

SOCIAL HISTORY:

The patient is divorced. She lives with her 11-year-old daughter in [redacted]

HABITS:

No alcohol or cigarette use.

REVIEW OF SYSTEMS:

GENERAL: No constitutional symptoms, fevers, or sweats. HEENT: Prior to December, the patient had the history of migraine but none for two years, and she had no symptoms of dysphagia, epistaxis, tinnitus, or diplopia. CARDIAC: No paroxysmal nocturnal dyspnea, orthopnea, palpitations, or history of heart irregularity. Reportedly, the two-dimensional echocardiogram was unremarkable. PULMONARY: No history of asthma or chronic lung problems. GASTROINTESTINAL: No dyspeptic symptoms or change in bowel habits. GENITOURINARY: Continent of urine with no recurrent episodes of urinary tract infection or kidney stone. MUSCULOSKELETAL: No peripheral arthritis, joint pain, Raynaud's, or extremity swelling. NEUROLOGICAL: As per the history of present illness.

PHYSICAL EXAMINATION:

VITAL SIGNS:	Temperature is 99, blood pressure 143/88, pulse 95, and respirations 19.
SKIN:	No rashes.
NECK:	Lymph nodes are not enlarged in the neck or supraclavicular area.
HEENT:	Pupils are equal, round, and reactive to light. Fundi normal. Oropharynx - no lesions except the tongue is dry and somewhat coated, although, I do not think this is Monilia. There is no

meningismus, thyromegaly, adenopathy, and no jugular venous distention.

CHEST: Good expansion, clear breath sounds.

HEART: Regular. No ejection click was noted. Point of maximum impulse is not displaced.

ABDOMEN: Normal to palpation with no hernia, no abnormal bowel sounds, and no organomegaly.

GU/PELVIC/RECTAL: Contraindicated by her current neurologic status.

EXTREMITIES: Full passive range of motion with intact peripheral pulses, no synovitis, no abnormalities in the muscles noted either.

NEUROLOGICAL: The patient is alert with very severe dysarthria, anarthria. The patient has no evidence of comprehensive deficit, and the language appears intact except for the severe dysarthria. Cranial nerves - II - visual fields appear intact. III, IV, VI - intact extraocular motion. V - corneal response is present bilaterally. VII - the patient has fairly symmetrical facial appearance, although, there may be some mild weakness bilaterally. VIII - hearing is present bilaterally. IX, X - gag is present bilaterally. XI - shoulder shrug is present on the right and decreased on the left. XII - tongue is midline. Motor - the patient has severe weakness in the poor range in the left upper extremity, and in the fair/fair minus range left lower extremity while the right-sided strength was generally good. Reflexes are 1+ bilaterally at the biceps, triceps,

brachial radialis and at the knee and ankle. The patient does have bilateral Babinski's sign.

Sensation is intact to touch both upper and lower extremities, including proprioception.

Cerebellar - the patient was not tremulous or ataxic on finger to nose with the right upper extremity nor is there nystagmus, but weakness left upper extremity makes it difficult to test for ataxia on the left.

The patient requires assistance to sit, stand, and is not able to ambulate initially.

IMPRESSION:

1. Recurrent pontine stroke with dysarthria and left hemiparesis.
2. Prior pontine posterior circulation stroke December 25, 1997, and January 5, 1998, rule out basilar artery abnormality or embolic source.
3. Anticoagulation.

PLAN:

The patient is appropriate for inpatient multidisciplinary rehabilitation treatment program, while neurology consultation follows this patient to assess whether there is a treatable cause for her recurrent episodes of stroke. No systemic vasculitis has been identified, and antibody screen has been negative. We will be exploring for alternative etiologies. The goal for the patient will be to be independent in self-care activities of living, swallowing, and ambulation. Planned rehabilitation therapy is to include 1) speech language treatment for improving voice volume articulation and oral motor skills 2) occupational

therapy for upper extremity strengthening left arm especially for fine motor skills progress to self-care activities of daily living 3) physical therapy for strengthening progress gait to stand and ambulate. Anticipating a unilateral support will be necessary. Anticipated length of stay two to three weeks depending on progress and etiology of process.

[redacted] M.D.

DICTATED BY
[redacted]
D: 5/3/98
T: 5/5/98
J: [redacted]

DATE OF CONSULTATION: 02/11/98

CONSULTING PHYSICIAN: [redacted] M.D.

ATTENDING PHYSICIAN: [redacted] M.D.

REASON FOR CONSULTATION:

The patient is a 41-year-old female. Neurology consulted for previous CVA times three. The patient is known to have a past medical history of migraine and three cerebral vascular accidents.

HISTORY OF PRESENT ILLNESS:

The patient is a pleasant, white, Caucasian female who is known to have some unresolved personal problems related to her ** life. She experienced her first episode of stroke when she woke up on Christmas morning last year. According to the patient, on December 25, 1997, she woke up and felt some burning sensation in her right eye, associated with weakness in the left upper and left lower extremities. For this, the patient was brought into the hospital where an extensive workup was done. The pertinent finding was that the patient had an MRI which showed increasing signal density in the pons, right side greater than the left, and a 3 mm increasing signal density in left **, with periventricular white matter changes, which were ischemic. For the left-sided weakness, the patient had extensive physical therapy and improved to a greater extent. The above weakness was associated with difficulty walking, also.

On January 5, 1998, at 9 a.m., the patient, upon awaking up, again noted that she had some blurring vision and pain in the left eye and some burning sensation in the left eye, and this sensation was associated with weakness in the right upper extremity with minimal weakness in the right lower extremity. This event was also associated with difficulty of speech and dysarthria. The patient again had an MRI and an angiogram which were explained to be negative. The second episode was unrelated to the left-sided weakness, which was markedly improved after the first episode of CVA. The second episode of stroke basically affected the patient's speech and the right upper extremity, and the right lower

extremity was not involved. The patient had extensive physical therapy for the second stroke, also at an outside hospital, with marked improvement. A complete vasculitis workup and ** and hypercoagulation workup was done on the patient, which all came out to be negative. Complete results are available in the chart at this time.

On February 4, 1998, according to the patient, she had an episode of some vision problems, which lasted about two hours. The patient describes it as some decreased vision in both eyes, not blurring of vision, not diplopia, but some funny kind of vision changes, which the patient had some decreased vision. However, this episode lasted for two with complete recovery.

On the following day, February 5, 1998, the patient again woke up with weakness in the left side of the body, with no vision changes. This new episode was superimposed on the previous weakness that the patient had for the stroke she had on December 25, 1997. The right side remained unaffected, with a maximum recovery from the second stroke that the patient had. For this, the patient was admitted to the hospital. A neurology consult was requested to follow it up.

Since the first stroke, the patient has been on Coumadin. This also seems to be an association with the patient's menstrual cycle and the three episodes of stroke that she has had. According to the patient, all three events have been just a day or two prior to her menstrual bleeding and possible association with it.

An MRI that was done on the December 26, 1997, showed an increased density in the pons, right side greater than the left, with some increased signal density in the left thymus with periventricle white matter ischemic changes. MRI, which was done on December 26, 1997, was within normal limits. The Doppler was within normal limits. The follow-up MRI, which was done for the second episode was within normal limits, except for the old changes. The other blood work that the patient had for her vasculitis in the outside hospital were parietal cell antibodies, which were in normal range. The smoothe muscle antibodies were within normal range. The

skeletal muscle antibodies were within normal range. The compliment competency three was normal, compliment competency four was normal, the ** factor was less than 20. The sclerae derma antibodies were less than 0.91, which is within normal limits. The lipid profile was done, which was within normal limits. The DNA antibody was negative. The ** antibody was less than 1 ** 20, which is within normal range. The myocardial antibody was within normal limits. The parietal cell antibodies were within normal limits. The myelin basis protein in the CSF was less than one. The cryptococcus antigen was negative. There were no illegal ** bands detected in the CSF. There were no illegal ** gamma globulins attacking the CSF. The ** receptor antibodies were less than 0.5. the ** antibodies were nonreactive. The lime disease antibodies screen was less than 0.80, within normal limits.

The patient had all this worked up in an outside hospital in the first month of this year.

MEDICATIONS:

Coumadin for the past few weeks.

SOCIAL HISTORY:

The patient denies any significant smoking, ethanol. The patient is presently in a divorce litigation and very depressed about the situation.

PHYSICAL EXAMINATION:

NEUROLOGIC: The patient was a awake, alert, oriented times four, absolutely oriented to time, place, and person. She had a clear sensorium, no hallucination, illusion, delusion. Her memory was intact for immediate and remote. The speech was slurred. The affect was appropriate. A Mini-Mental examination was done, which was 28/30. The patient lost two numbers

in the field **. The ** examination: The patient fixes and follows without any visual field defect. The pupils were 3 mm bilaterally, symmetrical to light and accommodation. There was no visual field cut. The extraocular muscles moved in all directions without any nystagmus movement. There was no diplopia. The disks were sharp. The facial tone was symmetrical bilaterally with no ptosis or droop seen. However, there was decreased visual sensation on the left side in the distribution of V1, V2, V3. However, the patient states that she could feel it, but the sensations were decreased as compared to the right side. There was positive gag reflex. The tongue was in midline without any atrophy fasciculation. The palate elevation was symmetrical. There was no hanging defect. The sternocleidomastoid power and shoulder shook were normal on the right side. However, the shoulder shook was decreased on the left side, secondary to the weakness of the left upper extremity.

MOTOR:

The motor tone was normal in all the extremities, bilateral upper and lower extremities. There was no atrophy or fasciculations seen at this time. The power ** that the deltoid, biceps, triceps, brachi radialis, wrist flexors, and wrist tensors, and intrinsic calf muscles were all five by five in the right. In the left the deltoids were three by five, triceps three by five, wrist extensors two by five, and wrist flexors two by five. The intrinsic calf

muscles were two plus by five. In the right leg, ** ,quadriceps, hamstrings, tibias anterior, gastrocnemius, toe flexors and the toe extensors were all five by five. On the left lower leg, the ** quadriceps, hamstrings, tibialis anterior, and the gastrocnemius were three by five. The extensor of the toe and the flexor of the toe, with the extensors of the ankle and the flexors of the ankle on the left side were three plus by five. Sensation: Except decreased sensation on the left side of the face, pinprick, fine touch, crude touch, pressure, and temperature were fine in both the upper and lower extremities. The patient could appreciate proprioception and vibration in bilateral upper and lower extremities. There was no compliment of hyperesthesia or burning sensation at this time. Coordination: The patient can perform the fine coordinating movement of finger-to-nose and finger-to-finger test in the right upper extremity. However, there does not seem to be any ataxic component, but the patient cannot perform this test on the left side, secondary to the weakness in the left upper extremity. The heel-to-shin test was normal in both the lower extremities. Reflexes: The reflexes were brisk generally. The right biceps, right triceps, and the right brachi radialis reflexes were +2. The left biceps, left triceps, the left brachi radialis reflexes were +3. The patellar jerk on the right and left were +3. The ankle jerk on the right and left were +2. The

patient has upgoing toes on both sides. And both sides were positive Babinskis. The gait was unsteady, secondary to weakness in the left side, and the patient was not ataxic or broad-based but unstable, secondary to the weakness on the left lower extremity. However, the patient can walk with minimum assistance at this time.

IMPRESSION:

A 41-year-old female with past histories of three episodes of neurological events, CVAs. Ischemic stroke times three.

PLAN:

At this time we will re-evaluate the angiogram with the neurologist and the family. Wi[redacted]d panel, and will also ask the Stroke Servi[redacted]t.

[redacted]

DICTATED BY [redacted] M.D.

[redacted]
D 02/12/98
T 2/13/98
[redacted]

DATE OF CONSULTATION: 02/22/98

CONSULTING PHYSICIAN: [redacted], M.D.

REFERRING PHYSICIANS: [redacted] M.D.

REASON FOR CONSULTATION:

Emotional lability.

HISTORY OF PRESENT ILLNESS:

This is a pleasant 41-year-old woman with one child, who has had three cerebrovascular accidents over the last couple of months. The first one was on December 25, again on January 5, and then most recently on February 4 she had noted some problems with vision. She has been hospitalized here on the Rehabilitation Unit beginning February 10. The patient has had a complete neurological workup and she is currently on Coumadin, heparin, and steroids.

The patient is very tearful and has difficulty giving any kind of coherent history other than to say she has never been depressed before and that she notes that she cries intensely on any kind of emotional experience, or sometimes she reports that she will laugh, again out of proportion to the stimuli. Initially when I saw the patient on February 19 she was somewhat dysarthric but now is improving with much better volume and very little dysarthria. During both interviews the patient became very tearful and had difficulty talking about almost any kind of emotion-laden material.

PAST PSYCHIATRIC HISTORY:

There is no previous history of psychiatric illness.

PAST MEDICAL HISTORY:

The patient and her mother deny any previous medical history. She states that she has always been extremely well and active.

2/26/98 [redacted]

FAMILY HISTORY:

Family history is negative for the immediate family. She did have a maternal uncle who died at age 85 with a history of alcoholism, and there was a maternal distant cousin who apparently committed suicide early in his or her life. The patient's mother gives the history.

SOCIAL HISTORY:

The patient has been a single mother for an extended period of time. Her ex-husband lives in [redacted] She has been raising her daughter on her own. She denies any past problems or any particular stressors. She is a schoolteacher and apparently has been enjoying her career. Of significance, though, she apparently was concerned about her weight and was taking an over-the-counter appetite depressant, which apparently contains ephedrine, and she had been using this prior to her strokes.

MENTAL STATUS:

She is an alert and cooperative woman whose speech is slightly dysarthric and low volume on February 19, but appears improved today on February 22. Her mood is dysphoric, her affect is extremely labile. There are no perceptual disturbances noted, no suicidal or homicidal ideation. Insight judgment and impulse control are somewhat impaired vis-à-vis the lability of affect. Formal cognitive testing is not done at this time, although I think this will be necessary after she is stabilized somewhat more. She is oriented to person, place, and time.

ASSESSMENT:

This is a 41-year-old divorced schoolteacher living in [redacted] with her daughter, who has undergone three cerebrovascular accidents beginning in December, the last being recently in February, who had been taking an appetite suppressant containing ephedrine prior to the strokes.

DIAGNOSIS:

AXIS I: Mood disorder secondary to cerebrovascular accident and steroids.

AXIS II: Deferred.

AXIS III: Brain stem cerebrovascular accidents that she has been having and resolving dysarthria. She also has left-sided weakness.

AXIS IV: Severe.

AXIS V: 35.

PLAN:

I discussed the case with Dr. [redacted] on February 19 and also with Dr. [redacted] I believe that she would benefit from one of the SSRI's, but because of the critical nature of her illness at the present time, I have discussed with the patient that we should probably wait nearer to her discharge before instituting an SSRI. We also have to continue to monitor her Coumadin level, since all the antidepressants are going to interfere and raise the level of Coumadin.

Thank you for allowing me to see this young woman. I will continue to follow her.

[redacted]

[redacted]
D 02/22/98
T 2/23/98
[redacted]

March 20, 1998

RE:
DOB:
MED.REC.NO.:
SS#:
POLICY NO.:

Dear Benefits Specialist:

I am the attending physician for this patient during her inpatient rehabilitation hospitalization from February 10, 1998 through today, March 21, 1998, when she is being discharged home.

This patient has had an extraordinarily complex and serious condition which began December 25, 1997, when she presented with her first of four separate stroke events.

The ultimate diagnosis is that of a basilar artery vasculitis with basilar artery thrombosis resulting in recurrent pontine and brain stem stroke events.

The patient presented with left-sided weakness in December and subsequently a right-sided stroke developed on January 5, 1998 and again on February 5, 1998. The patient had left-sided weakness. There was one further event in later February.

The patient has been placed on longterm anticoagulation, initially with heparin and now with Coumadin, maintaining an INR in the range of 3 to 3.5, in addition to which she is on daily aspirin therapy and she will need to be monitored on a very frequent/careful basis for anticoagulation therapy to maintain in this therapeutic range to reduce risk for addition thrombosis.

From a functional point of view, the patient has made substantial improvement in her rehabilitation therapy. At

one point, she was essentially quadriplegic and aphonic due to the profound brain stem compromise. At this point, she is ambulating household distances with standby assistance and she is beginning to communicate more effectively verbally, though she still has severe dysarthria. Her swallowing has improved so that she is taking oral feedings without aspiration.

I expect that her recovery will be very protracted and the degree of improvement in her speech/dysarthria is most difficult to predict. Undoubtedly, she will have some residual difficulty with her speech pattern, phonation, voice volume, and clarity. Additionally, some degree of motor residual deficit is expected. At this point, she does require a brace on the left foot/ankle and is likely to require this for some time.

She will be having outpatient physical therapy, speech therapy and occupational therapy several times per week for the next several months.

She will be monitored periodically by her primary neurologist, Dr. [redacted] and also Dr. [redacted] here at [redacted] I am not anticipating that a return to work would be feasible, even with modifications, for a period of nine to twelve months.

You may request additional information that will confirm the details discussed above from the Medical Records Department of [redacted]

Sincerely,

[redacted]

M.D.

[redacted]

d: 3/20 t: 3/20

[redacted]

DATE OF ADMISSION: 03/06/98

DATE OF DISCHARGE: 03/21/98

REASON FOR HOSPITALIZATION:

This 41-year-old bilingual educational kindergarten teacher returned to rehabilitation following a stroke, secondary to basilar artery thrombosis, associated with vasculopathy, vasculitis, that was suspected to be essentially related with mild CSF monocytosis. Initial stroke on December 25, 1997; a second stroke January 6, 1998; third stroke February 6, 1998; and the fourth event while on rehabilitation, on February 25. The patient was on Lovenox at the time, with an INR of 1.11 on February 19, 1998.

The patient was placed on IV heparin and aspirin, after MRA showed progressive basilar artery vertebral artery thrombosis and evolving pontine stroke.

Her blood pressure was supported with Florinef after dopamine was discontinued, and also Elavil was discontinued.

The patient received five daily doses of Aricept.

The patient received five daily 500 mg Solu-Medrol doses just prior to the most recent stroke, and is now on tapering Medrol.

PERTINENT FINDINGS ON ADMISSION:

Please refer to Dr. [redacted] dictated History and Physical.

PERTINENT LABORATORY FINDINGS:

March 9, 1998: Sodium 139, potassium 3.2, chloride 98, bicarbonate 25, glucose random 158, BUN 14, creatinine 0.4, total protein 6.6, albumin 4.1, uric acid 3.8, calcium 9.3, phosphorus 3.4, total bilirubin 0.5, cholesterol 235, alkaline phosphatase 74, AST 18, ALT 52, LDH 182, magnesium 1.9.

March 20, 1998: WBC 8.6, RBC 3.59, hemoglobin 11.0, hematocrit 32.1, MCV 89, MCH 30.6, MCHC 34.2, platelet count 241,000.

March 21, 1998: Prothrombin time 33.8, INR 2.99.

March 7, 1998: PTT 60.9.

Radiology, March 9, 1998: MRA revealed nonvisualization of the distal vertebral arteries. Nonvisualization of the basal artery with the exception of one small segment measuring less than 1 cm.

There were three transcranial Doppler studies that were performed while the patient was on rehabilitation. Please refer to her rehabilitation chart for the results.

HOSPITAL COURSE:

This 41-year-old female was motivated and participated in her rehabilitation program, and upon discharge the patient had increased strength in the bilateral upper extremities, with increased functional independence. The patient has been trained in proper techniques of task completion and safety. The patient will have assistance at home from the family for high level tasks and activities.

The patient achieved an increase range of motion bilaterally, with the right greater than the left. She had increased grip and pinch strength, with increased proximal muscle strength in the bilateral upper extremities. Bed mobility was independent. She was supervised for high level transfers, and she had fair to good control and balance with assist. She had increased knowledge of her precautions, and she was able to be supervised for activities of daily living and self-care, but will require minimum to moderate assistance with high level tasks with home management skills.

In physical therapy, the patient was independent, using a front wheel walker for household mobility. She was able to ambulate,

with supervision, greater than 200 feet. At the time of discharge, she required an ASO device on the left side, but still accentuated left knee hyperextension with use of the ASO.

The patient was also seen by speech pathology, and the patient was on a mechanical soft diet with thin liquids, with chin tuck. She was able to attend to multiple stimuli in a noisy environment with 80% accuracy. Her sentence level of intelligibility was at 60% with unfamiliar persons, and she had a rapid rate, and continued to increase the use of speech strategies such as pausing, phrasing, decreasing the rate, and over-enunciation, as well as final sounds.

The patient was hyper-nasal, with dysarthria. She was able to perform her oral motor exercises and breathing exercises with fair accuracy. It was recommended that she continue with outpatient therapy with regard to the speech, at least three times a week for approximately 3-4 weeks with regard to eye level cognition, and continue eligibility training and oral motor exercises.

During her stay on rehabilitation, her anticoagulation was adjusted by the pharmacy. She was initially on heparin, and then converted to Coumadin with aspirin according to pharmacy protocol, and upon discharge the patient was on 4 mg of Coumadin every evening, with 81 mg of aspirin a day.

There were transcranial Doppler studies that were performed serially on this patient during her rehabilitation stay, and those results are documented in the medical records if needed to be reviewed.

It is anticipated that the patient's anticoagulation with Coumadin, her INR should be from 3 to 3.5 as a goal range, and continue her 81 mg of aspirin daily.

DISCHARGE INSTRUCTIONS:

Medications:

1. Prozac 20 mg 1 capsule every morning.
2. Pepcid 20 mg 1 capsule at hour of sleep.
3. Florinef 0.1 mg 1 tablet daily.
4. Aspirin 81 mg 1 tablet daily.
5. Colace 100 mg 1 tablet three times a day.
6. Coumadin 2 mg tablets, 2 tablets every evening.
7. Medrol 48 mg orally every morning.
8. Aces 1 tablet every day. This is for vitamins C, E, and carotene supplements.

Follow-up:

1. Patient will continue to have outpatient therapy at [redacted], [redacted] telephone number [redacted] Ext. [redacted] Contact person is [redacted] Appointment has been scheduled for Thursday, March 26, at 9:00 A.M.
2. Anticoagulation therapy will be followed by Dr. [redacted] neurologist, at [redacted] Address is [redacted]
3. Follow-up with Dr. [redacted] at [redacted] in approximately two to three weeks.
4. Follow-up with Dr. [redacted] at [redacted] Telephone number is [redacted] in approximately four to six weeks.
5. Dr. [redacted] has also recommended that the patient follow-up with transcranial Dopplers on a weekly basis, and repeat an MRA in approximately four weeks. This is to be arranged by Dr. [redacted] office.

FINAL DIAGNOSES:

1. Status post basilar artery infarct, pontine infarct.
2. Suspected ephedra vasculitis.
3. Anticoagulation.

[redacted] M.D.

DICTATED BY [redacted]

[redacted]

D 04/06/98
T 04/07/98

[redacted]