

MEDICAL RECORD REVIEW
K – M
SAMPLE CASE

FALL SPINAL CORD INJURY
PAST MEDICAL HISTORY IN REGARDS TO PSYCHOLOGICAL / PSYCHIATRIC THERAPIES

PREPARED FOR:
ATTORNEY AT LAW

PREPARED BY:
BOBBI BLACK RN CLNC
A LEGAL RESOURCE SERVICE
201 OAK BLVD., P. O. Box 67
HUXLEY, IOWA 50124
PH: 515-597-4203 FAX: 515-597-3287

THIS CASE INVOLVED A 36 YEAR OLD FEMALE WHO WAS INJURED IN A FALL. THE LEGAL NURSE CONSULTANT WAS ASKED TO IDENTIFY ANY PAST MEDICAL HISTORY THAT INVOLVED TREATMENT OR WAS SUGGESTIVE OF PSYCHOLOGICAL OR PSYCHIATRIC COMPONENT.

CONTENTS OF REPORT

1. SUMMARY OF EVENTS	1
2. GLOSSARY OF TERMS	4
3. CONCLUSION	8
4. FACT CHRONOLOGY	11
5. MEDICATIONS	15
6. DOCUMENTS	19
7. HEALTH CARE PROVIDERS AND ORGANIZATION	20
8. REFERENCES	21

Summary of current event

M--K is a 37 year old female who suffered injury to her spinal cord following a fall from a moving truck in July 1996. Her injuries resulted in a severed spinal cord injury leaving her wheelchair bound. She developed multiple depressive, emotional and psychological components during her course of rehabilitation therapy which required psychological counseling and treatment.

Summary Past Medical History involving Psychological / Psychiatric treatments

Ms. M. presented to Dr. D Primary Care Physician beginning on 3/30/84 with complaints of numbness and tingling of her upper extremities. Physical Examination revealed no abnormalities leaving an unexplained etiology in regards to her symptoms. She was admitted S. Hospital for testing and Neurological Consultation. Ms. M was assessed and evaluated by Dr. A , Neurologist. Again, neurological examination and workup revealed no etiology for her symptoms. Ms. M. was discharged will plans to follow her as an outpatient with no treatment or medications prescribed.

On April 16, 1984 M--K returned in follow up to Dr. Neurologist with continued complaints of numbness and tingling and now also complained of sleep disorders and loss of appetite. Dr. Neurologist recommended Amitriptyline 150 mg. By June 1984 Ms. M was reporting that her symptoms were worsening. She returned to Dr. Neurologist for follow up who felt there was no etiology confirming the basis of her complaints. Ms. M also reported she was currently in the process of divorce and Dr. Neurologist recommended Desipramine, an anti-depressant in attempt to relieve some of the anxiety involved with her marital situation.

Ms. M returned to Neurologist Dr. Neurologist in August of 1985. She reported that she had discontinued Desipramine however she had restarted Amitriptyline at 25 mg in order to help her with sleep and that she felt she had relief of her symptoms since she had started the Amitriptyline. Dr. Neurologist felt the dosage was below a therapeutic level however felt that as her divorce was complete the anxiety and stress levels most likely had decreased. Dr. Neurologist's Examination revealed deficits in motor strength and reflex findings. He concluded a diagnosis of Fibromyalgia and recommended to continue Amitriptyline, at the 25 mg dose and to return as needed. Ms M did continue to follow with Dr. Neurologist for her neurological symptoms.

By November of 1986, Ms. M is ambulating with a cane. She returned to her Primary Care Physician, Dr. D. and reported that she was experiencing severe headaches on 11/12/86.

Diagnostic studies were negative and again etiology remained undefined. Dr D refers her to Dr. P, Psychiatrist for evaluation.

On 11/13/85 Ms. M was assessed and evaluated by Dr. P, Psychiatrist and an MMPI was obtained. Results of the MMPI concluded "no psychological overlay", at this time. Dr. P recommended further neurological work up and once more referred Ms. M. to the Neurology Department Time she was assessed and evaluated by Dr. B. Neurologist on 11/15/86. Multiple diagnostics were obtained which confirmed a Diagnosis of Multiple Sclerosis. It was recommended that Amitriptyline be continued for complaints of insomnia.

Ms. M managed her Multiple Sclerosis very well with little complaints until March of 1991 at which time Ms. M presented to S. Hospital Emergency Department and Dr. D, her Primary Care Physician with complaints of severe headaches for 2 days. She reported an increase in numbness and tingling. She reported her current medications included only the Amitriptyline. Dr. D consulted with Dr. B, Neurologist. It was decided that she be medicated with Demerol, started on Dilantin and she was referred back to Dr. B Neurologist for consultation and further work-up to determine the cause of the severe headaches.

Ms. M did return to Dr. B Neurologist. His Neurological Consultation of 4/12/91 revealed that Ms. M was experiencing Migraine Headaches. Amitriptyline was discontinued at this time and Desipramine was re-started and the Dilantin was continued.

Ms. M continues neurology follow up with Dr. B through February of 1992. Her symptoms exacerbated to include memory lapse and seizure disorders. Medications through this time period were Desipramine and Dilantin to control the headaches. Dr. B reported Ms. M is having difficulty coping with her illness and subsequently she was referred to Counseling Center for supportive counseling.

Counseling Center progress notes revealed the Ms. reported consistently to every scheduled visit and soon joined the MS Support groups. By November 1994 follow up visits with Dr. B revealed a decrease in her MS symptoms. Dr. B felt that she was most likely in remission.

Neurology Department Office visit dated February 15 1996 revealed that Ms. M was no longer in need of ambulatory assistance with a cane, her visual disturbances have resolved, although she did require corrective lenses, and she is no longer experiencing migraine headaches. At this time she discussed with Dr. B, her return to work with SS Company. Dr. B agreed she could return to work with work restrictions. Medications; Amitriptyline, for sleep, Desipramine and Dilantin for headaches were continued.

From 1994 - 1996 Ms. M continued with the Counseling Center. Counseling Center Progress notes revealed that Ms. M was coping well with her illness. Desipramine was discontinued by Dr. P Psychiatrist however she remained on Amitriptyline at 25 mg daily, at bedtime. Dr. P also documented that this is less than a therapeutic dosage and felt it primarily helped Ms. M sleep. Assessment findings revealed her mood was good, she was alert and oriented and well aware of the limitations of her illness. She verbalized an understanding that exacerbation of her symptoms could occur and Dr. P. felt she was dealing well, overall.

Glossary of Terms

10/8/2004 12:47:46 PM

Full Name	Description
Arnold-Chari Formation	A condition in which the inferior poles of the cerebellar hemisphere and the medulla protrude into the spinal canal. Also related to Hydrocephalus and spina bifida.
Ataxia	An inability to coordinate muscle activity during voluntary movement; most often due to disorders of the cerebellum or posterior columns of the spinal cord; may involve the limbs, head or trunk.
Atonic	Relaxed without normal tone or tension.
Conversion Disorder	<p>according to Marx: Rosen's Emergency Medicine pp. 1566</p> <p>Also known as hysterical neurosis, conversion type, the rare conversion disorder is characterized by the sudden onset and dramatic presentation of a single symptom, typically simulating some nonpainful neurologic disorder for which there is no pathophysiologic or anatomic explanation. The symptoms, generally conforming to the patient's own idiosyncratic ideas about illness, are not under the patient's voluntary control. Some symptoms provide gratification for unconscious dependency needs; other symptoms provide escape from painful external emotional stimuli (e.g., hysterical paralysis in battle). Although the symptoms may have a symbolic relationship to the precipitating factors, this is often not the case. The most common conversion symptoms are voluntary motor or sensory functions and are therefore called pseudoneurologic.</p>
Depression	<p>according to Tasman: Psychiatry, 1st ed., pp.990</p> <p>The depressive disorders are characterized predominantly by lifelong vulnerability to episodes of disease, involving depressed mood or loss of interest and pleasure in activities, and continuing potential for cycling of mood from euthymia to Depression to recovery and sometimes to hypomania. When the mood disorder is severe, the potential for psychosis leads to profound disruption of cognitive functioning.</p> <p>This clinical syndrome invariably involves alterations in mood experienced as a feeling of sadness, irritability, dejection, despair, or loss of interest or pleasure. Associated neurovegetative or biological signs of Depression include impairment in sleep, appetite, energy level, libido, and psychomotor activity.</p> <p>Familiarity with risk factors for Depression may help the psychiatrist recognize or diagnose this common and serious psychiatric illness. Accordingly, the Depression Guideline Panel [11] enumerated 10 primary risk factors for Depression: 1) history of prior episodes of Depression; 2) family history of depressive disorder, especially in first-degree relatives; 3) history of suicide attempts; 4) female sex; 5) age at onset before 40 years; 6) postpartum status; 7) comorbid medical illness; 8) absence of social support; 9) negative, stressful life events; and 10) active alcohol or substance abuse.</p> <p>Whereas a 4% to 5% current prevalence rate of MDD exists in community samples, symptoms of Depression are found in 12% to 36% of patients with a general medical condition. The rate of Depression may be higher</p>

Glossary of Terms

10/8/2004 12:47:46 PM

Full Name	Description
**	in patients with a specific medical condition. MDD is identified as an independent condition and calls for specific treatment when it occurs in the presence of a general medical condition.
Fibromyalgia	<p>The fibromyalgia syndromes (myofascial pain syndromes, fibromyositis) are a group of disorders characterized by achy pain and stiffness in soft tissues, including muscles, tendons (which attach muscles to bones), and ligaments (which attach bones to each other).</p> <p>The pain and stiffness (fibromyalgia) may occur throughout the body or may be restricted to certain locations, as in the myofascial pain syndromes. Fibromyalgia throughout the body is more common in women than in men. Men are more likely to develop myofascial pain or fibromyalgia in a particular area, such as a shoulder, from an occupational or recreational muscle strain. Fibromyalgia isn't dangerous or life threatening, but persistent symptoms can be very disruptive.</p> <p>Causes: Although its cause is unknown, fibromyalgia may be triggered by physical or mental stress, inadequate sleep, an injury, exposure to dampness or cold, certain infections, and occasionally rheumatoid arthritis or a related disorder.</p> <p>A common variation, the primary fibromyalgia syndrome, usually occurs in previously healthy young women who may be depressed, anxious, or stressed, often with interrupted and nonrestorative sleep.</p>
Hysterionic or Hysteria	pejorative term used to mean "conversion reaction" or widely fluctuation of emotions.
MMPI	Minnesota Multiphasic Personality Inventory test is a questionnaire type of psychological test for ages 16 and over with 550 true-false statements coded in 4 validity and 10 personality scales which may be administer in both an individual or group format.
Multiple Sclerosis	<p>MS is an autoimmune disease, whereby the body's immune system, which normally targets and destroys substances foreign to the body such as bacteria, mistakenly attacks normal tissues. In MS, the immune system attacks the brain and spinal cord, the two components of the central nervous system.</p> <p>A demyelination of the white matter of the brain and spinal cord occurring in scattered patches, and resulting in a chronic disabling condition characterized by visual disturbances, weakness, tremors, and finally paralysis.</p> <p>Multiple sclerosis is an inflammatory relapsing or progressive disorder of CNS white matter and a major cause of disability in young adults. Pathologically, it is characterized by multifocal areas of demyelination with relative preservation of axons, loss of oligodendrocytes, and astrogliosis. Although certain clinical features are characteristic of MS, investigative studies are often needed to confirm the clinical suspicion and</p>

Glossary of Terms

10/8/2004 12:47:46 PM

Full Name	Description
**	<p>exclude other possibilities.</p> <p>Complications of MS</p> <ul style="list-style-type: none"> • Spasticity is overall the most disabling problem in MS and is particularly difficult to manage. Many simple muscle relaxants have been used with poor results. Diazepam can reduce spasticity, but the doses required for good effect are so high that drowsiness is a major problem, which makes it impractical. • Another disabling feature of some MS cases is cerebellar Ataxia. Ataxia is probably the most disabling feature of MS, since training and effort do not improve the incoordination, imbalance, and gait disturbance. • Many patients notice that a warm room, a muggy day, sitting in front of a hot fire, or taking a hot bath causes an increase in symptoms. • The major thrust has been in reducing spasticity and muscle spasms by various destructive procedures on nerves, roots, and spinal cord or by phenol or alcohol injections into the intrathecal space. • MS patients often complain of bladder frequency, urgency or incontinence. Urologic assessment is needed to clarify what type of bladder dysfunction is present. • Inactivity predisposes to constipation, which is a common complaint of MS patients. • MS patients may complain of sexual dysfunction. More commonly with males after years of pyramidal involvement. • Pain is much more common in MS than thought; symptomatic trigeminal neuralgia, muscle spasms, and dermal hyperesthesias or dyesthesias are examples. • Fatigue is the most common complaint of MS patients, occurring in 80%, and is their major complaint in 40% of cases. It is an unusual fatigue, consisting of a feeling of inertia as if the subject's mainspring had broken rather than increasing weakness with persisting muscular activity; it can be very severe and disabling. • Psychological Problems occur often. MS patients must be educated about their disease to gain any confidence about their future. Most have many conflicts and problems related to their families, income, and future. Tranquilizers and antidepressants are frequently used to treat symptoms along with medical and psychological counseling.
Panic Attacks	<p>Extreme and unreasoning anxiety and fear, often accompanied by disturbed breathing, increased heart activity, vasomotor changes, sweating and a feeling of dread.</p>

Glossary of Terms

10/8/2004 12:47:46 PM

Full Name	Description
Somatic	Pertains to structures of the body wall, skeletal muscles.
Somatoform Disorder	<p>according to Marx: Rosen's Emergency Medicine pp 1565-1571</p> <p>Patients with somatization disorder describe their symptoms in dramatic exaggerated fashion using colorful language, with great detail about how their lives have been disrupted. They usually admit to being sickly throughout life. Although extensive, their narrative suggests no clear diagnostic constellation. Patients offer detailed accounts of multiple prior medical encounters, termed "doctor shopping," and often display multiple abdominal scars because they undergo two to three times the number of surgeries of other patients.[4] [35]</p> <p>Their medical records have numerous and exotic test results, and they faithfully consume an impressive array of medications acquired from multiple primary care physicians and specialists. They report allergies to a comprehensive list of antibiotics and analgesics.</p> <p>These patients are often emotional and vain, exhibit limited interpersonal skills, and have few close personal relationships. They are typically dependent (especially on the physician), and often seductive (yet sexually unresponsive), and highly manipulative.</p> <p>Of these patients, 68% fulfill the criteria for histrionic personality disorder. Somatization disorder may be closely related to some anxiety and affective disorders; more than 80% of patients with somatization disorder report a lifetime history of major depression, and 68% a history of anxiety. These individuals may threaten or attempt suicide. Completed suicide is usually associated with psychoactive substance abuse. Women with this disorder tend to marry men with antisocial personalities. The husband often is overly solicitous, demanding that his wife receive many clinical studies and quick, decisive action. Predictably, he usually shows some degree of dissatisfaction with physicians in general.[31]</p> <p>Patients who do not meet the full criteria of somatization disorder but have suggestive symptoms for 6 months or longer may be classified as having undifferentiated somatoform disorder, which is treated similar to somatization disorder</p>

Conclusion and Key Points

K-M is a 36 year old female, mother of 3 who sustained severe spinal cord injury and head trauma from a fall, while working for ABC Trucking Co.

Diagnosis / Injuries following the incident:

- Severe spinal cord injury L5 –L7
- Paraplegia
- Head Contusions
- Cranial Neuropathies
- Fracture Base of the Skull
- Depression

Ms. M's Past Medical History (*see priors Injury and Diagnosis*) reveals ongoing assessments and evaluations by Family Practice Clinic and subsequent referral to Neurology Associates from the time periods of 1985 through 1991. She presented with vague symptoms consistent with Demyelinating Disease however for approximately 3 years organic etiology was undetermined. She also underwent ongoing treatment for migraine headaches. She experienced gait abnormalities, tremors, mood swings, sleep disturbances, bladder symptoms. Concurrently she had marital problems and sought divorce. Prescribed treatments through this time period include multiple anti-depressant medications however Ms. M returned without positive effect from the drugs. Psychiatric evaluations determined no Psychological / Psychiatric Components, malingering was ruled out and eventually Multiple Sclerosis was diagnosed and determined as the cause of these symptoms.

Once this diagnosis was made and symptoms managed. K-M was able independently maintain activities of daily living, she was able to care for her children without assistance, she re-married as well as held productive employment.

Discussion

1. It is not uncommon for physician's to look for psychological components when substantial organic causes cannot be determined. It will be important to discuss with the treating physicians Ms. M's psychological states at the time of each visit. As it is also not uncommon for medications, such as antidepressants to be used for their secondary benefits, it will be important to further discuss their rationale for prescribing antidepressants, given the fact that for some time the etiology of her complaints was undefined. It may also be important to expand the discussion in regards to the fact Ms. M did not always respond positively to the prescribed treatment which may further support no psychological components were involved.
2. I would suggest a focus and review by our medical experts of M-K's repeated visits, vague complaints, months of undefined organic etiology and to determine the significance and relationships of those complaints to the final conclusions of the following:
3. **Multiple Sclerosis:** is a progressive disorder of the Central Nervous System. Pathologically, it is characterized by multi-focal areas of Demyelination (*destruction of myelin sheath of nerve tissue*), loss of oligodendrocytes (*Neurological cell having delicate processes*) and astrogliosis (*breakdown of cells making up neurological tissue*). Although certain features are characteristic of MS, investigation is often needed to confirm the diagnosis. The treatment records provided by Family Practice frequently refer to etiologies as unknown however she is treated with anti-depressive medications. A medical expert review

will be important to establish the significance of these findings as related to the characteristic presentation of most MS patients.

4. **Depression:** Is diagnosed at the time K—M is involved in divorce. Reasonably, a major life style change can be associated with periods of depression. It will be important to discuss with treating psychiatrist Dr. P his 11/14/86 at which time he felt there were no psychiatric features involved
5. **Migraine Headaches:** Many patients respond well to an antidepressant medication for treatment of migraine headaches, therefore it is not uncommon to see this treatment provided for these complaints. In turn it is quite common to see medical providers to alternate drugs often to increase the effectiveness. It will be important to discuss with all the treating providers as well as a medical expert Neurologist the migraine headache treatments will be important to establish the treatment regimens prescribe for Ms. M and typical usage of these antidepressant drugs for sleep disorders. Dr. N—(Neurologist), may be a very supportive witness.
6. **S. Hospitalization 1986;** Dr. Psychiatrist evaluation concluded "no psychological/psychiatric components at this time".

Possible Witnesses

1. B. Neurologist, MD
2. D. Primary Care , MD
3. P. Psychiatrist, MD
4. S. Program, PhD (Psychologist)
5. D. S. Social Worker

These providers have treated K—M before and after the diagnosis of MS. The documentation is suggestive of the "quandary" at the time of her presenting symptoms, which may be supportive to the rationale of anti-depressive medication being used through this time period.

Suggestions for further Discovery

1. A more in depth literature search could prove to be beneficial as related to emotional or depressive symptoms related to serious, chronic illness as well as specific for multiple sclerosis.
2. Pharmacy records, prior the accident, to determine the amount of drug and refills obtained as well as the recommended therapeutic dosages for these drugs.
3. It may be helpful to obtain work records to establish if any tardiness or absenteeism.

Sample PI Head Injury / Psychiatric History

Fact Chronology

Authored by:

Bobbi Black
A legal Resource Service

Tuesday, August 30, 2005

Fact Chronology

8/30/2005 12:10 PM

Date & Time	Source(s)	Fact Text
Fri 03/30/1984	Neurology Associates, office notes Bates: NA 21 A. Neurologist, M.D.	Referred by D. Primary Care, M.D. for complaints of numbness and tingling Impression: Hemi-sensory Complaint with perineal numbness, hypotonic bladder and right upper extremity fatiguability. In view of the patient's age and nature of her symptoms, Demyelinating disease would appear to be the leading consideration. Recommendations: Admit to S. Hospital for complete Neurological work-up.
Thu 04/05/1984	S. Hospital , Discharge Summary Bates: SH 10 A. Neurologist, M.D.	Neurological Work up is Negative, however upper extremity weakness continues. Recommend observation as an outpatient.
Mon 04/16/1984	Neurology Associates, office notes Page NA 22 A. Neurologist, M.D.	K-- M-- returns to the neurology office for follow up visit and continues to experience physical symptoms. Now to include sleeplessness and discusses marital problems. Neurological Exam reveals no corresponding abnormalities Impression: Psychological Component or Conversion Disorder Recommendations: Amitriptyline 150 mg is prescribed.
Wed 06/06/1984	Neurology Associates, office notes Bates: NA 25 A. Neurologist, M.D.	K-- M-- returns for a follow up visit. She reports that she is currently seeking divorce, continues with sleepless nights. Neurological exam - noted as Negative Desipramine is prescribed
Fri 11/02/1984	Neurology Associates, office notes Bates: 26 A. Neurologist, M.D. S. Hospital, Physician Progress Note	K-- M-- returns for renewal of Amitriptyline. She reports that divorce is complete and getting along well. Desipramine resulted in excessive fatigue so returned on her own to Amitriptyline. Objective assessment: K-- M-- is cheerful and very pleasant. She is alert, oriented to person, time and place and appears in good spirits after the divorce. She has cut medication drastically, taking only 25 mg Amitriptyline and getting along well, sleeping at night. This dosage is barely therapeutic and I certainly feel that as her home situation has improved her overall "outlook", thus relieving her depressive symptoms. Physical Examination: She continues to have weakness in her left arm, which appears to be progressing. Tinel's sign and Phalen's sign are positive. Nerve Conduction Study is not consistent with Carpal Tunnel Syndrome. Impression: Questionable Demyelinating Disease Recommendations: Admit for further Neurological work-up for weakness.

Fact Chronology

8/30/2005 12:10 PM

Date & Time	Source(s)	Fact Text
Mon 11/05/1984	S. Hospital, Discharge Summary Bates SH 25	K-- M-- is discharge to home. Diagnosis: Hand Tremors etiology unknown possible Demylinating Disease Medications: Inderal L.A and Amitriptyline
Thu 08/15/1985	Neurology Associates, office notes Bates: NA 27 A. Neurologist, M.D.	K-- M-- is seen for a follow up visit. She is doing well and denies pain or sleep disturbance" Diagnosis; suspect Fibromyalgia Recommend: Stay on Amitriptyline 75mg and will follow as an outpatient.
Thu 09/05/1985	Family Practice, Office Notes Bates: FP 101 D. Primary Care, M.D.	K-- M-- returns today with complaints of "having attacks again" and unexplained falling. No actual loss of consciousness. She has evidence of weakness in upper and lower extremities. No focal or objected Neurological findings. Medications: Amitriptyline (antidepressant) 75 mg at bedtime Impression: Continue to suspect Psychogenic Component Depression Anxiety/Panic Attacks.
Thu 12/05/1985	Family Practice, Office Notes Bates: FP 105 D. Primary Care, M.D.	K-- M-- presents to the office today with complaints of cold symptoms and sore throat Impression: "strep throat". Current medications: she continues on Amitriptyline 75 mg at bedtime. Recommendations: Ceflexin (antibiotic) for her cold symptoms.
Fri 02/07/1986 - Sun 02/09/1986	S. Hospital, Admission Note Bates: SH 100 S. Hospital, Discharge Summary Bates: SH 99 D. Primary Care, M.D.	Reason for Admission Neurological Complaints Questionable Multiple Sclerosis Hospital Course: classified as uneventful. Diagnostic Studies included Spinal Fluid Exam and MRI of brain. Work Up Negative for Demyelinating Disease or Structural Intracranial Process. Impression: Ataxia, Hand Tremors of unknown etiology Depression Atonic Bladder

Fact Chronology

8/30/2005 12:10 PM

Date & Time	Source(s)	Fact Text
Wed 11/12/1986	Family Practice, Office Notes Bates: FP 105 D. Primary Care, M.D.	Approxiamately 12 days prior had problems with a limp and began using a cane. Experienced tingling sensations below left knee that left extremity tingling and weak. Weakness noted in upper extremities also. K-- M-- reports 2 Emergency Dept. visits within the past week for complaints of severe Headache. Received injection Impression: Rule out Demyelinating Disease (noted as doubtful) Psychogenic Overlay with regard to clinical symptoms Recommendation: Admit for further evaluation
Thu 11/13/1986	S. Hospital, Consultation Note Bates: MH 120 P. Psychiatrist, M.D.	K-- M-- is admitted for further psychiatric work up and evaluation. D. Primary Care, M.D. requests consultation with P. Psychiatrist, M.D. Reason for Admission noted as: Further evaluation of neurological symptoms including Psychological Evaluation and Testing. Admission Diagnostic studies reveal: MRI of Brain - Normal Lab: CBC normal range Basic Metabolic Profile - abnormal Creatnine 1.4 remainder of study with in normal range. Cerebral Spinal Fluid - Normal Glucose with slight elevation of Protein @ 62 mg% Cervical myelogram - Mild Central Anterior Extra-dural Defect at C 3-4 Chest Xray Negative. Electroencephalogram - Normal
Fri 11/14/1986	S. Hospital, Progress Notes Bates: SH 208 P. Psychiatrist, M.D.	Impression: Mental Status: No Psychiatric Features at this time Recommends: 1. Further Neurological Work-up 2. Request , B. Neurologist, M.D. for Consultation. will discuss with D. Primary Care, M.D.
Mon 11/17/1986	S. Hospital, Consultation Note Bates: SH 210-211 B. Neurologist, M.D.	Impression: Demyelinating Disease - Probable Multiple Sclerosis

Medications

10/8/2004 12:49:03 PM

Full Name	Description
Lorbitol	<p>DRUG CLASS: Antidepressants, tricyclic; Anxiolytics; Benzodiazepines Indications: Anxiety; Depression</p> <p>Lorbitol is indicated for the treatment of patients with moderate to severe depression associated with moderate to severe anxiety.</p> <p>The therapeutic response to Lorbitol occurs earlier and with fewer treatment failures than when either Amitriptyline or chlordiazepoxide is used alone.</p> <p>Symptoms likely to respond in the first week of treatment include: Insomnia, feelings of guilt or worthlessness, agitation, psychic and somatic anxiety, suicidal ideation and anorexia.</p>
Imipramine	<p>DRUG CLASS: Antidepressants, tricyclic Indications: Depression; Enuresis</p> <p>For the relief of symptoms of depression. Endogenous depression is more likely to be alleviated than other depressive states. One (1) to 3 weeks of treatment may be needed before optimal therapeutic effects are evident.</p>
Meclazine	<p>DRUG CLASS: Antiemetics/antivertigo; Antihistamines, H1 Indications: Motion sickness; Vertigo</p> <p>Effective: Management of nausea and vomiting, and dizziness associated with motion sickness. Possibly Effective: Management of vertigo associated with diseases affecting the vestibular system.</p>
Mellaril	<p>DRUG CLASS: Antipsychotics; Phenothiazines Indications: Behavior disorder; Depression; Psychosis</p> <p>Thioridazine HCl is indicated for the management of schizophrenic patients who fail to respond adequately to treatment with other antipsychotic drugs. Due to the risk of significant, potentially life-threatening, proarrhythmic effects with thioridazine HCl treatment, thioridazine HCl should be used only in patients who have failed to respond adequately to treatment with appropriate courses of other antipsychotic drugs,</p>
Inderal L.A	<p>DRUG CLASS: Antiadrenergics, beta blocking; Antiarrhythmics, class II Indications: Angina pectoris; Arrhythmia, supraventricular; Extrasystole, atrial; Extrasystole, premature ventricular; Fibrillation, atrial; Flutter, atrial; Headache, migraine; Hypertension, essential; Infarction, myocardial; Tremor, essential</p> <p>Migraine Propranolol is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in</p>

Medications

10/8/2004 12:49:03 PM

Full Name	Description
**	<p>the treatment of a migraine attack that has started has not been established, and propranolol is not indicated for such use.</p> <p>Essential Tremor Propranolol is indicated in the management of familial or hereditary essential tremor. Familial or essential tremor consists of involuntary, rhythmic, oscillatory movements, usually limited to the upper limbs. It is absent at rest but occurs when the limb is held in a fixed posture or position against gravity and during active movement. Propranolol causes a reduction in the tremor amplitude but not in the tremor frequency. Propranolol is not indicated for the treatment of tremor associated with Parkinsonism.</p>
Librium	<p>DRUG CLASS: DRUG CLASS: Anxiolytics; Benzodiazepines</p> <p>Indications: Alcohol, withdrawal; Anesthesia, adjunct; Anxiety disorder, generalized Librium (Chlordiazepoxide) is indicated for the management of anxiety disorders or for the short-term relief of symptoms of anxiety, withdrawal symptoms of acute alcoholism, and preoperative apprehension and anxiety. Anxiety or tension associated with the stress of everyday life usually does not require treatment with an anxiolytic.</p>
Amitriptyline	<p>DRUG CLASS: Antidepressant also known as Elavil Uses- Major Depression</p> <p>Amitriptyline has also been used in the treatment of dysthymia, neuropathic and chronic pain, somatoform pain disorder, migraine and post traumatic stress disorder, although these uses are not explicitly approved by the FDA.</p> <p>An alternate method of initiating therapy in outpatients is to begin with 50-100 mg Amitriptyline HCl at bedtime. This may be increased by 25 or 50 mg as necessary in the bedtime dose to a total of 150 mg/day.</p> <p>For outpatients 75 mg of Amitriptyline HCl a day in divided doses is usually satisfactory. If necessary, this may be increased to a total of 150 mg/day.</p>
Doxepin	<p>DRUG CLASS: Antidepressant (tricyclic) Uses: Major depression, anxiety, topical pruritis (itching).</p> <p>Doxepin HCl is Recommended for the Treatment of:</p> <ol style="list-style-type: none"> 1. Psychoneurotic patients with depression and/or anxiety. 2. Depression and/or anxiety associated with alcoholism (not to be taken concomitantly with alcohol).

Medications

10/8/2004 12:49:03 PM

Full Name	Description
**	<p>3. Depression and/or anxiety associated with organic disease 4. Psychotic depressive disorders with associated anxiety including involuntional depression and manic-depressive disorders.</p> <p>The target symptoms of psychoneurosis that respond particularly well to Doxepin HCl include anxiety, tension, depression, somatic symptoms and concerns, sleep disturbances, guilt, lack of energy, fear, apprehension and worry.</p>
Desyrel	<p>DRUG CLASS: Antidepressant a/k/a Trazadone (SSRI) Select Serotonin Release Inhibitor</p> <p>Trazodone HCl is indicated for the treatment of depression. The efficacy of trazodone HCl has been demonstrated in both inpatient and outpatient settings and for depressed patients with and without prominent anxiety. The depressive illness of patients studied corresponds to the Major Depressive Episode criteria of the American Psychiatric Association's Diagnostic and Statistical Manual, III</p> <p>Major Depressive Episode implies a prominent and relatively persistent (nearly every day for at least 2 weeks) depressed or dysphoric mood that usually interferes with daily functioning, and includes at least four of the following eight symptoms: change in appetite, change in sleep, psychomotor agitation or retardation, loss of interest in usual activities or decrease in sexual drive, increased fatigability, feelings of guilt or worthlessness, slowed thinking or impaired concentration, and suicidal ideation or attempts.</p>
Dilantin	<p>DRUG CLASS: Anticonvulsant Indications: Epilepsy, complex partial; Epilepsy, generalized tonic-clonic; Epilepsy, secondary to neurosurgery</p> <p>Non-FDA approval of Dilantin has also been used for the treatment of trigeminal neuralgia (and other neuralgias) and migraine.</p>
Flexeril	<p>DRUG CLASS: Muscle Relaxant Uses: for relief of muscle spasm and pain in musculoskeletal conditions Flexeril (Cyclobenzaprine HCl) is indicated as an adjunct to rest and physical therapy for relief of muscle spasm associated with acute, painful musculoskeletal conditions.</p>
Desipramine	<p>DRUG CLASS: Antidepressant (Tricyclic) Used for depression</p> <p>Desipramine has also been used in the treatment of neuropathic pain, bulimia, and stimulant abuse (particularly cocaine abuse), although these uses are not explicitly approved by the FDA.</p>

Medications

10/8/2004 12:49:03 PM

Full Name	Description
Prozac	<p>DRUG CLASS: Antidepressants, serotonin specific reuptake inhibitors Indications: Bulimia nervosa; Depression; Obsessive compulsive disorder; Premenstrual Dysphoric Disorder (PMDD)</p> <p>Prozac (Fluoxetine) is indicated for the treatment of depression. A major depressive episode (DSM-IV) implies a prominent and relatively persistent (nearly every day for at least 2 weeks) depressed or dysphoric mood that usually interferes with daily functioning, and includes at least 5 of the following 9 symptoms: Depressed mood; loss of interest in usual activities; significant change in weight and/or appetite; insomnia or hypersomnia; psychomotor agitation or retardation; increased fatigue; feelings of guilt or worthlessness; slowed thinking or impaired concentration; a suicide attempt or suicidal ideation.</p>

Documents

10/8/2004 1:11:40 PM

Bates - Begin	Bates - End	Full Name	Date	Author(s)
FP 99	FP 149	Family Practice, Office Notes	Sat 03/30/1985 - Wed 09/12/1990	D. Primary Care, M.D.
MH 120	MH 125	S. Hospital, Consultation Note	Thu 11/13/1986	P. Psychiatrist, M.D.
MH 126	MH 130	USA Mental Health Center Office Progress Notes	Sun 11/30/1986 - Sat 12/05/1987	P. Psychiatrist, M.D.
NA 21	NA 35	Neurology Associates, office notes	Wed 03/30/1983 - Wed 09/11/1985	A. Neurologist, M.D.
NA 22	NA 30	Consultation Letters from Neurology Clinic to Primary Care Provider	Sun 03/30/1986 - Wed 11/05/1986	A. Neurologist, M.D., B. Neurologist, M.D.
PT 10	PT 25	Physical Therapy Progress Notes	Tue 08/27/1996 - Wed 03/17/1999	P. Therapist. PT
SH 10	SH 10	S. Hospital , Discharge Summary	Thu 04/05/1984	A. Neurologist, M.D.
SH 100	SH 100	S. Hospital, Admission Note	Fri 02/07/1986	D. Primary Care, M.D.
SH 11	SH 12	S. Hospital, Discharge Summary	Mon 11/05/1984	A. Neurologist, M.D.
SH 114	SH 123		To Be Determined	
SH 202	SH 207	S. Hospital, Physician Progress Note	Fri 11/02/1984 - Mon 11/05/1984	A. Neurologist, M.D.
SH 208	SH 208	S. Hospital, Progress Notes	Fri 11/14/1986	P. Psychiatrist, M.D.
SH 210	SH 211	S. Hospital, Consultation Note	Mon 11/17/1986	B. Neurologist, M.D.
SH 99	SH 99	S. Hospital, Discharge Summary	Fri 02/07/1986	D. Primary Care, M.D.
UH 137	UH 201	USA Univeristy Hospital Progress Notes	Sun 07/04/1999 - Mon 09/20/1999	D. C. Physician, M.D.
UH 202	UH 250	USA University Hospital Rehabilitation Progress Notes	Sun 07/04/1999 - Mon 09/20/1999	M.M. Rehab, M.D.

Health Care Providers

10/8/2004 12:45:04 PM

Full Name	Title	Works For
J--. N--., R.N.	Registered Nurse	S. Hospital, Visiting Nurse Services
P. Psychiatrist, M.D.	Psychiatrist	USA Mental Health Center
M.J.Doe, M.D.	Family Practice	Family Medicine, P.C.
P--Q--., M.D.	Neurologist	USA University Hospital and Clinics
D. C. Physician, M.D.	Neuro-Surgeon	USA University Hospital and Clinics
P. Therapist. PT	Physical Therapist	USA University Hospital and Clinics
R. Smith, R.N.	Registered Nurse	S. Hospital, Visiting Nurse Services
M.M. Rehab, M.D	Rehabilitation Specialist	USA University Hospital and Clinics
S. Jones, PhD	Psychologist	USA Mental Health Center
D. S. Worker	Social Worker	USA University Hospital and Clinics, Social Services Dept.
A. Neurologist, M.D.	Neurologist	Neurology Associates, P.C.
K-- M--	Patient	
S. Program, PhD	Psychologist	USA Mental Health Center
R. Urologist, M.D.	Urologist	Urology Associates
M. Q. Doctor	Family Practice	Family Medicine, P.C.
B. Neurologist, M.D.	Neurologist	Health Care Clinic, P.C.
D. Primary Care, M.D.	Family Practice	Family Medicine Associates, P.C.
P--. L--., M.D.	Emergency Room Physician	USA University Hospital and Clinics
R--. B--., M.D.	Family Practice	Family Medicine, P.C.
T--. S--., M.A.CCC	Speech Therapist	USA University Hospital and Clinics
J--K--., R.N.	Registered Nurse	USA University Hospital and Clinics, Emergency Dept.
D. Chiropractor, D.C.	Chiropractor	Chiropractic Clinic, P.C.

Case Research; Literature

10/8/2004 12:51:06 PM

Authority Name	Extract Text
<p>Bourdette D - Neurology - 10-Sep-2002; 59(5): E6-7</p>	<p>Depression is a treatable cause of suffering among multiple sclerosis patients and can result in suicide. Depression results from chemical changes within the brain and results in feeling sad, excessive tiredness, loss of interest in daily activities, and changes in eating and sleeping habits. Severe Depression can lead to thoughts of suicide and is the most common problem leading to suicide. Importantly, Depression is usually treatable with medications and psychotherapy.</p> <p>Depression often complicates multiple sclerosis (MS). Estimates vary, but 50 to 60% of MS patients develop some degree of Depression and, like Depression in general, it responds to treatment. While MS is often disabling, it rarely causes death. One cause of premature death among MS patients is suicide, which occurs more frequently in these patients than in the general population. You can learn more about Depression and MS on the next page</p>
<p>Defer G - Rev Neurol (Paris) - 01-Sep-2001; 157(8-9 Pt 2): 1128-34</p>	<p>Cognitive and psychiatric disorders have long been described in MS. However, these symptoms were only well evaluated starting about fifteen years ago. More recently, there has been renewed interest in cognitive and psychiatric assessment in MS, especially due to the emergence of new therapies for the disease. Psychiatric symptoms mainly include Depression and anxiety. Depression is generally moderate, but there is a risk of suicide that is clearly higher than in the general population. Depression is not correlated with the duration of symptoms, type of disease or level of disability. Mild elation and pathological laughing and crying can be associated and are more frequent in case of severe disease. Bipolar affective disorders and alexithymia are more rare. The question of premorbid personality has been questioned for Depression but not confirmed. It has been suspected for bipolar affective disorders. Cognitive disorders are observed in 40 to 65% of the cases at any period of the disease. They mainly include an impairment of working and long-term memory, executive functions and attention whereas global intellectual efficiency is impaired later. While cognitive disorders can be observed early in the course of the disease, there is no correlation with the level of disability or duration of the disease.</p>
<p>Goetz: Textbook of Clinical Neurology, 1st ed., Copyright © 1999 W. B. Saunders Company</p>	<p>Affective disorders are more frequent in MS patients than in the general population. These include both anxiety and Depression. Neither of these symptoms is related to physical or cognitive disability or the lesion load visualized by MRI. Patients sometimes experience uncontrollable weeping or less commonly laughter noncongruent with their mood. Interruption of inhibitory corticobulbar fibers is responsible for these symptoms (pseudobulbar affect).</p>
<p>Goldman: Cecil Textbook of Medicine, 21st ed., Copyright © 2000 W. B. Saunders Company</p>	<p>One of the major psychological burdens for an MS patient is uncertainty about the future course of the illness. The physician should acknowledge the unpredictable course but emphasize the spectrum of severity and the significant proportion of patients who remain neurologically intact for many years.</p>
<p>Marx: Rosen's Emergency Medicine: Concepts and Clinical Practice, 5th ed., Copyright © 2002 Mosby, Inc.</p>	<p>The clinical features of MS can be divided in a manner similar to the divisions of a neurologic examination. They can be divided into aspects of cognitive impairment, cranial nerve dysfunction, impairment of motor pathways, impairment of sensory pathways, impairment of cerebellar pathways, and impairment of bowel, bladder, and sexual functions.</p> <p>Patients with MS have frequent complaints of poor memory, distractibility, and a decreased capacity for sustained mental effort. Formal neuropsychological testing suggests that cognitive involvement is common and underreported. Specifically, neuropsychological testing has shown that 43% to 65% of patients with MS have cognitive impairment. Notably, there is a</p>

Authority Name	Extract Text
**	correlation between the MRI-based total lesion load and cognitive impairment.
Noble: Textbook of Primary Care Medicine, 3rd ed., Copyright © 2001 Mosby, Inc.	Mental changes may occur but usually only late in the disease. Patients may note subtle problems in learning new information, identifying this as a memory problem, although memory may be normal on testing. Euphoria was once said to be the most common emotional abnormality, but Depression is more common. The development of marked emotional changes in a patient with MS should always suggest demyelination involving the periventricular areas and the frontal lobes. After years, neuropsychologic testing may show intellectual changes, but these may be missed on standard tests and only recognized by tests specially designed for MS.
O'Connor P - Neurology - 24-Sep-2002; 59(6 Suppl 3): S1-33	<p>Key issues in the diagnosis and treatment of multiple sclerosis. An overview.</p> <p>Symptoms and signs.</p> <p>Because MS lesions can occur in many different parts of the CNS, they can cause a wide variety of symptoms and signs. An exhaustive list of clinical findings seen in MS clinics at the Universities of British Columbia and Western Ontario, Canada, is provided by Paty and Ebers, [7] together with estimates of the frequencies of each finding at onset and at any time. According to this list, initial neurologic symptoms and signs seen in 10% or more of patients include fatigue (20%, probably more common than this in many populations), optic neuritis (16%), internuclear ophthalmoplegia (17%), nystagmus (20%), vertigo (4–14%), gait disturbances (18%), sensory loss (30–50%, most commonly in the legs and implicating the posterior columns), increased deep tendon reflexes (20%), weakness in the legs (10%), spasticity (10%) and bladder disturbance (3–10%). Symptoms and signs seen in 50% or more of patients at any time include cognitive changes (70%), euphoria (10–60%), Depression (25–54%), fatigue (80%, probably nearer 90% in many populations), optic neuritis (65%), optic atrophy (77%), retinal nerve fiber loss (80%), nystagmus (85%), vertigo (5–50%), dysarthria (50%), limb Ataxia (50%), Ataxia of the gait and trunk (50–80%), sensory loss (90%, again, most commonly in the legs and implicating the posterior columns), increased deep tendon reflexes (90%), weakness in the legs (90%), spasticity (90%), extensor or flexor spasms (50%), cramps (50%), amyotrophy (50%), bladder disturbance (80%), and sexual disturbance (50% in women, 75% in men).</p>