

Challenging Issues in MS

A Collection of Case Studies



IOMSN

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Case Study 1: Alex

- 23-year old male comes to your clinic for consultation requested by treating general neurologist. He is accompanied by his parents.
- Diagnosed with MS 3 months ago and started on interferon beta 1b after receiving 2 rounds of IV steroids 3 weeks apart with appreciable benefit in his gait. He reports that before the steroids he would often fall to the right and have to use the walls to walk.
- Consultation is to confirm that he is on best treatment option since a previous 2nd opinion recommended fingolimod or natalizumab.

Case Study 1: Alex

- During history, patient reports symptoms initially started when he was 14-years old with acute right leg pain and weakness which was assumed to be sports related injury, “symptoms would come and go over the years.”
- He reports that he started having balance difficulties and heat sensitivity when he was 15 and assumed he was “growing too fast.”

Case Study 1: Alex

- At 16 his parents report that he would become inappropriate “laughing uncontrollably and having drastic mood swings.” He started failing in school and began socially withdrawing. They took him to a psychiatrist and were told that “he was acting out.”
- He has had trouble keeping a job after high school and complains that he is always tired. He states that “everyone says I’m lazy and I need to grow up.”

Case Study 1: Alex

- He also reveals that he currently has bladder dysfunction, erectile dysfunction and trouble with attention, concentration and memory.
- His parents express guilt and sadness revealing that they assumed he had psychiatric issues.

Case Study 1: Alex

- His exam reveals bilateral nystagmus on end gaze, right facial nerve palsy, dysarthria, spasticity in bilateral lower extremities, hyperreflexia throughout, sustained clonus RLE>LLE, sensory deficit for vibration below clavicles, upping toes bilaterally and ataxic spastic gait.

Case Study 1: Alex

- **Magnetic Resonance Imaging (MRI) taken before steroids in May reveal 6-8 enhancing lesions through out the brain with lesions noted in the periventricular white matter abutting the ventricles, thinning of the corpus callosum, as well as the cerebellum, and a large lesion seen in the pons extending into medulla.**
- **There are multiple T2 lesions seen in the cervical and thoracic spine.**
- **Cerebrospinal fluid (CSF) analysis was positive for oligoclonal bands and JCV antibody was negative.**

Case Study 1: Alex

- What are the next steps?
- Would you recommend a different therapy?
- What treatment options would you recommend?
- How would you counsel this patient? His parents?
- What other interventions should be initiated?

Case Study 2: Jenna

- 35-year old executive who works 50-60 hours a week.
- Travels frequently.
- Diagnosed with MS 7 years ago.
- Initially had infrequent exacerbations.
- Treated with oral and IV steroids.

Case Study 2: Jenna

- Two years ago: developed bilateral lower extremity weakness, a T10 sensory level, forgetfulness.
- Treatment with an injectable disease-modifying therapy (DMT) was initiated.
- Currently, Jenna does not feel she is getting better.
- As a result, she administers DMT injections intermittently.

Case Study 2: Jenna

- Although she has difficulty with self-injection, she will not ask her family for assistance.
- Over time, she has become increasingly anxious and isolated.
- Her social and work relationships have suffered.

Case Study 2: Jenna

Discussion Points

- What is your assessment of this patient?
- How can we help?
- What would be your initial recommendation?
- Follow-up?

Case Study 2: Jenna

- What are some treatment options to consider for Jenna?
- What counseling and education points are necessary to cover for other treatment options you might consider for Jenna?
- What referrals might be appropriate to consider?
- What follow-up will be necessary?

Case Study 3: Belinda

- 28-year old female with a 5 year history of active MS.
- Reports to the clinic with a sudden onset of mild arm weakness and some subtle slurring of speech.
- Started natalizumab 3 years ago.
- One relapse since starting which was 2 weeks after she started first infusion.

Case Study 3: Belinda

- She is anti JC virus positive and has previously been treated with interferon beta-1a and mitoxantrone.
- Other medications include multivitamins and vitamin D.
- Recent urine culture is negative for an infection.

Case Study 3: Belinda

Discussion Points

- Is this an MS relapse?
- What are your concerns given the patient history?
- What other tests might you obtain?
- Would you treat with steroids?

Case Study 4: Charles

- 31-year old male diagnosed 8 years ago.
- Initially treated with injectable agents; glatiramer acetate (GA) and interferon beta-1a TIW.
- Previously, Charles experienced 1-2 relapses annually.
- Switched to an oral disease modifying therapy for 2 years.
- Since changing therapy, has less than 1 relapse per year.

Case Study 4: Charles

- Lives alone and has intermittent assistance from a community program.
- Complains of short term memory problems and difficulty with activities of daily living (ADLs).
- Charles calls early one Friday morning requesting a referral to a dentist.

Case Study 4: Charles

- States that he has had facial pain for about one week and needs to see a dentist.
- When questioned by the nurse, it was determined that the pain emanated from his ear to his chin and is worse at night.

Case Study 4: Charles

Discussion Points

- What is your assessment?
- What treatment should be initiated?
- Does the patient need a dentist?
- MRI?

Case Study 5: Donna

- 46-year old woman was diagnosed in 1992 and presents for further help in your office.
- Initially, she experienced a relapsing-remitting course with mild and infrequent exacerbations.
- Several years later, she had a severe attacks that left her with paralysis of both legs and bladder retention.

Case Study 5: Donna

- After discharge from a rehabilitation facility, she required a walker and motorized tricart for mobility.
- She stopped working and is on full time disability and has a limited monthly budget.
- She lives alone and never married, she never had children, but she is very active in the local MS community.

Case Study 5: Donna

- Current symptom management includes amantidine for fatigue, oxybutynin chloride for bladder urgency and frequency, methanamine hippurate to improve urine acidity and takes gabapentin for pain.
- She and has counseling, rehabilitation, and support group services to help her cope with her ongoing disability.

Case Study 5: Donna

- Donna presents at your practice requesting treatment with an oral disease modifying therapy since her support group has urged her to consider new treatments.
- The group stated that “it is not too late for you.”

Case Study 5: Donna

Discussion Points

- What would you recommend at this time?
- How can you help this patient realistically?
- What other treatment options should be considered?

Summary: Nursing Implications

- **Select among appropriate treatment options when considering patient disease prognostic factors such as: CNS cerebellar or motor tract involvement, objective evidence as seen on MRI lesion burden, and the severity and interval rate of relapse with incomplete recovery and/or disability.**
- **Consider a careful risk-benefit evaluation in making decisions and identifying optimal treatment choices for an individual patient, in initiating therapy or changing treatment.**
- **Incorporate MS evidence-based information into practice in determining treatment strategies in managing MS symptoms.**
- **Maintain awareness of safety monitoring required with some of the newer disease-modifying therapies.**

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