



Update: Steroids and Antivirals for Bell Palsy

Case Presentation: Part I

A 34-year-old female with a history of seasonal allergies is referred to the neurology clinic by her primary care physician for right-sided facial weakness.

The patient notes that she been suffering from an upper-respiratory tract infection for the past week. The previous morning, she noticed some pain over her right ear. This was followed over the next couple hours by drooling from the right corner of her mouth and dryness in her right eye. When she looked in the mirror, she noted that her face appeared distorted. Furthermore, she could not close her right eye. When she ate lunch, her taste was blunted. The symptoms all came on over the course of 3 hours and have stayed largely the same since.

There is no associated blurring of vision, double vision, rash, hearing loss, numbness, or weakness. She denies any tick exposure. She denies any chance that she could be pregnant. She was seen by her primary care physician, who referred her to the neurology clinic.

Her past medical history includes seasonal allergies. Her past surgical history includes a tonsillectomy in childhood. Otherwise, she denies any chronic illness.

She does not take any medicines regularly. She is not on any oral contraceptives.

She has no known drug allergies.

She does not smoke, drink alcohol, or use illicit substances. She is a Spanish translator for a local hospital.

There is no family history of neurologic diseases or diabetes mellitus.

In addition to what is noted above, a complete 14-topic review of systems was obtained and was unremarkable.

On physical examination, she is a well-developed and well-nourished female in no distress. She is afebrile. Her blood pressure is 115/70, pulse is 65, and respiratory rate is 12.

No bruits are heard over her neck. There are no murmurs or abnormal heart sounds. There are no vesicles or rash over her face or ears.

She is alert and oriented to person, place, and date. Registration and 5-minute recall are normal. She follows commands and names and repeats without difficulty. Her speech is fluent and clear.

Cranial nerve testing reveals PERRLA; optic discs are sharp, visual fields are full to confrontation, and extraocular muscles are intact. Facial sensation is normal. She has right-sided facial weakness as manifested by an asymmetric smile, eye closure weakness (she can only close the right eye to the top of the pupil), and problems with elevating the right eyebrow. Hearing is intact bilaterally to finger rub. Palate, tongue, and uvula are midline. Shoulder shrug strength is normal.

Motor strength is MRC grade 5/5 throughout. Tone is normal in the arms and legs.

Sensory examination shows normal pinprick response, temperature, vibratory response, and proprioception in her extremities.

Reflexes are 2/4 in the arms and legs. Plantar responses are flexor bilaterally.

Coordination is normal on finger-nose-finger and heel-knee-shin testing bilaterally.

Her gait is narrow-based and steady.

The patient's primary care physician orders some blood work. You review the workup, which shows an unremarkable complete blood count and comprehensive metabolic panel, including normal serum glucose, Lyme titers, and thyroid-stimulating hormone.

You discuss with the patient that she is having a type of facial nerve dysfunction called a Bell palsy. You describe for the patient the course and function of the facial nerve and how the nerve is affected in Bell palsy. You also counsel her about the typical natural history of this illness. You counsel the patient that the recently published American Academy of Neurology guideline "Update: Steroids and Antivirals for Bell Palsy"¹ suggests that steroid treatment is highly effective at increasing the probability of complete facial muscle recovery. You state further that the role of antiviral medicines is less certain. You explain that a benefit from the addition of antivirals to steroid treatment has not been strongly shown in well-designed studies. Further, if the addition of antivirals to steroid treatment were to have any added benefit, the effect would be marginal at best. After some discussion, the patient elects to start a course of steroids. You prescribe her prednisone 60 mg daily for 1 week. You discuss common side effects. You also discuss the importance of good eye hygiene, including the need to keep the eyes moist and to wear an eye patch at night.

Finally, you discuss that, as her presentation and examination are typical for Bell palsy, she does not need any brain imaging at the present time. However, you ask her to contact you if she has any worsening or new neurologic symptoms.

Part I Evaluation and Management Coding

The proper initial patient code in this situation would be 99244 or outpatient consult, level 4. The history and physical are comprehensive, and the medical decision making would be moderate complexity.

Case Presentation: Part II

The patient returns to the neurology clinic in 3 months. She has finished the short courses of prednisone without difficulty. Since she was last evaluated, she has steadily improved. She cites the example that she can close her eye all the way. Her smile feels stronger. She has noticed that sometimes when she chews, her right eye will close. She denies any worsening of existing symptoms. She also denies any new neurologic symptoms.

Her medical history is unchanged. Her physical examination shows improved right-eye closure (she can completely close the eye) and facial muscle strength.

You discuss with her that she has improved as most patients with Bell palsy do. As she is following the typical course, there is likely no role for brain imaging at the present time. Finally, you discuss certain long-term sequela of Bell palsy, including synkinesis, which would explain how her eye closes sometimes when she chews.

The patient is offered a follow-up in 6 months but elects instead to follow up as needed.

Part II Evaluation and Management Coding

The return visit should be billed as 99213 or a level-3 established patient. The history is expanded problem focus, and the medical decision making would be low complexity.

Diagnosis Coding^{2,3}

The diagnosis is Bell palsy, and there are no associated diagnoses mentioned. There is a clear diagnostic statement in Part I of the case. Had Part II been a chart note, a separate statement that this patient has Bell palsy should be included.

The ICD-9-CM code for Bell palsy is:

351.0 Bell's Palsy
Facial palsy
Excludes that in newborn (767.5)

The ICD 10-CM code for Bell palsy is:

G51.0 Bell's Palsy
Facial palsy

Questions

1. With regard to the above-described case, which of the following statement(s) is/are correct?

- A. The patient is one of the 15%–30% of patients with Bell palsy who do not have complete recovery.
- B. Steroid use is effective to increase the chance of facial muscle function recovery.
- C. Short-course steroid treatment is usually easily tolerated by patients and is inexpensive.
- D. B and C are correct.
- E. All of the above are correct.

The correct answer is E. All of the above statements are correct.

2. In the above-described case scenario, adding an antiviral agent such as valacyclovir 1000 mg three times daily for one week would:

- A. Increase the probability of facial strength recovery by at least 7% or more.
- B. Lead to a modest increase in recovery.
- C. Be too cost-prohibitive, as antiviral agents can be expensive.
- D. None of the above.
- E. All of the above.

The correct answer is C. For patients with new-onset Bell palsy, antiviral agents in combination with steroids do not increase the probability of facial functional recovery by >7%. Patients might be offered antivirals in addition to steroids because of the possibility of a modest increase in recovery (Level C). Antiviral agents are usually fairly tolerated and can be expensive.

3. A 32-year-old African American male with a previous history of right facial droop 6 months previously that improved without treatment has returned to clinic with a new facial droop on the opposite side. The clinician would:

- A. Check an MRI of the head with and without contrast.
- B. Observe the patient, as most likely he will improve again without treatment.
- C. Perform a lumbar puncture for diagnostic purposes.
- D. A and C are correct
- E. None of the above is correct.

The correct answer is D. The patient does not appear to be a typical Bell palsy, wherein the cause is idiopathic. He should be worked out for possible causes of facial nerve dysfunction such as sarcoid, HIV, or Lyme disease. Observation alone is definitely not an option in any case.

¹Gronseth GS, Paduga R. Evidence-based guideline update: Steroids and antivirals for Bell palsy [published online ahead of print November 7, 2012]. Report of the Guideline Development Subcommittee of the American Academy of Neurology. *Neurology*. doi: 10.1212/WNL.0b013e318275978c.

² Centers for Disease Control and Prevention. International classification of diseases, ninth revision, clinical modification (ICD-9-CM). www.cdc.gov/nchs/icd/icd9cm.htm.

³ Centers for Disease Control and Prevention. International classification of diseases, tenth revision, clinical modification (ICD-10-CM). www.cdc.gov/nchs/icd/icd10cm.htm.

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