Bell’s Palsy…Not Really! Giant Prolactinoma Masquerading as Bell’s Palsy

Sara Shteyman, David Wozny, Ardit Shehu, Clara Weinstock, Leo Wolansky, Ketan Bulsara

Introduction

- Sellar masses are often heralded by visual compromise due to the anatomic relationship of the sella to the optic chiasm.
- Mass effects of these tumors can present with cranial nerve abnormalities, with nerve II, III, IV and VI most commonly affected.

Case Presentation

INITIAL PRESENTATION

- A 24 year old male with history of obesity presented to clinic for intermittent postprandial nausea, vomiting and left sided facial droop which began several months prior. Two weeks earlier, he was evaluated in the emergency room, diagnosed with Bell’s Palsy and his vomiting was attributed to his psychosocial stressors.

Examination:
- Left sided ptosis
- Decreased ability to raise his left eyebrow
- Inability to smile on left
- 65 lb weight gain over the past year.

Initial Workup:
- Lyme antibodies, Vitamin B12, Ferritin, Folate, Iron and TIBC, TSH, comprehensive metabolic panel, lipase, HIV antigen/antibody, HSV 1/2 antibody, ANA, ESR and CRP
- All unremarkable.

EVALUATION FIVE MONTHS LATER

- Blurred vision
- Slurred speech
- Cognitive difficulty
- Progressive left sided weakness manifested as frequent tripping.
- Continued left sided facial droop

Brain MRI revealed a giant parasellar mass (7.5 cm x 6 cm x 5.5 cm) with midline shift of 1.5 cm. (Figure 1)The patient was sent to the hospital for urgent workup and evaluation.
- Labs revealed a prolactin level of 11,000 ng/mL, suggestive of invasive prolactinoma.
- On exam he was also found to have left sided facial droop, peripheral visual field defects, abnormal tandem walk, and 4 out of 5 motor strength in left upper and lower extremity.

Following consultation with endocrinology, neurosurgery, and ophthalmology, the plan was for close observation and treatment with Cabergoline. Within 2 weeks of initiating treatment, the mass began to decrease in size.

Follow Up

After 16 months on cabergoline, prolactin levels have decreased to 850 ng/mL(Figure 2); MRI shows 80% reduction in tumor volume(Figure 3); patient had a 44 lb weight loss; patient had clinical resolution of fatigue, unilateral weakness, slurred speech, and vision changes.

Discussion

- In this case the patient’s giant prolactinoma was misdiagnosed as Bell’s Palsy on initial presentation.
- Any patient presenting with Bell’s Palsy should get a thorough neurological symptom assessment and exam including visual fields, heel-to-shin, rapid alternating movements, tandem walk, motor strength, sensation, and cranial nerves.
- New neurological symptoms or exam abnormalities warrant early intracranial imaging.

References:


Figure 1

Figure 2

Figure 3

Brain MRI revealed a giant parasellar mass (7.5 cm x 6 cm x 5.5 cm) with midline shift of 1.5 cm.