

WEAKNESS AND SENSORY DISTURBANCES

A 35 y.o. male patient who was working as a welder woke up the day of admission to the hospital with leg weakness and poor balance when walking. He has been healthy except for a history of diarrhea 10 days previously. The leg weakness progressed during the day to the point that the patient was taken from work to the hospital.

The general physical examination was normal. The neurologic examination revealed normal sensorium. The cranial nerves show normal visual acuity, full eye movements, no facial weakness and no deficit with the bulbar muscles. Breathing and swallowing was normal. The patient was able to stand up with help but was unable to walk. There was weakness of both legs more so distally than proximal. The muscle stretch reflexes were absent in the legs and the plantar responses were flexor. The sensory examination was normal to all modalities. The sphincters were normal. Pubnonary function tests were normal.

The spinal fluid was normal on admission but 10 days later showed increased protein with normal cell count and normal glucose.

- What is the most likely cause of this patient weakness?
- What type of test (s) can confirm the diagnosis?
- What is the best modality of treatment?
- What are the chances for total recovery?

67 y.o. obese female is referred to the neurology clinic because of leg pains. The patient relates that she has been having burning feet for the last 6 months. The pain was present on and off at the beginning but lately is more severe and constant. At night, she needs to get up and walk to alleviate the symptoms. Lately she has noticed some distal leg weakness. There is no problem with bladder control.

The neurologic examination showed normal sensorium and no deficit of the cranial nerves. There is distal 4/5 weakness of the feet. There is loss of sensation to pricking pain distal in stocking distribution to the lower third of both legs. The muscle stretch reflexes are absent in the legs and arms.

- What is the most likely diagnosis?
- What systemic disease is most likely to be present?
- How can you control the pain in these patients?

A 23 y.o. female patient is seen in the neurology clinic because of diplopia and difficulty swallowing. The patient relates that the diplopia appeared first and was transient first but lately is permanent. She sees double when she looks to the right and the objects are side by side. She also has noticed lately that both eyelids droop as she gets tired. She has problem chewing and sometimes she has difficulty getting the "food down". Her voice has also changed lately. Some of the symptoms improve or disappear with rest,

The neurologic examination showed a young female who has a normal sensorium. The cranial nerves showed asymmetric ptosis, worse on the left eye. There was weakness of the lateral rectus muscle of

the right eye. There was a snarl when the patient tried to smile and the speech became nasal as the patient continued to talk. The muscle strength in the upper limbs was 4/5 but normal distally. The muscle stretch reflexes were normal and the sensory examination was normal.

Blood chemistries and blood count were normal. A CT of the chest was normal.

- What are your diagnostic considerations?
- How do you confirm the diagnosis?
- Is there a blood test that can confirm the diagnosis?
- What do you expect to find on the EMG?
- How do you treat this disorder?