

Atypical Presentation of Paresthesias and Gait Abnormality in a Patient with Late Syphilis.

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CASE PRESENTATION

History of present illness:

37-year-old African American male presented with occasional patchy numbness of his extremities for the last 2 years, associated with headaches, neck stiffness, impaired short-term memory and poor concentration.

Associated symptoms:

- He had a 15-year history of painful subcutaneous nodules occurring in his abdomen, arms and legs
- He also reported a 4-month history of postprandial emesis with dizziness, epigastric pain, and a 10-pound weight loss.

Past Medical History:

Alcohol use disorder, depression, latent tuberculosis (completed treatment), and syphilis (treated with penicillin).

Sexual history:

Unprotected sexual intercourse with multiple female partners in the past.

Physical exam:

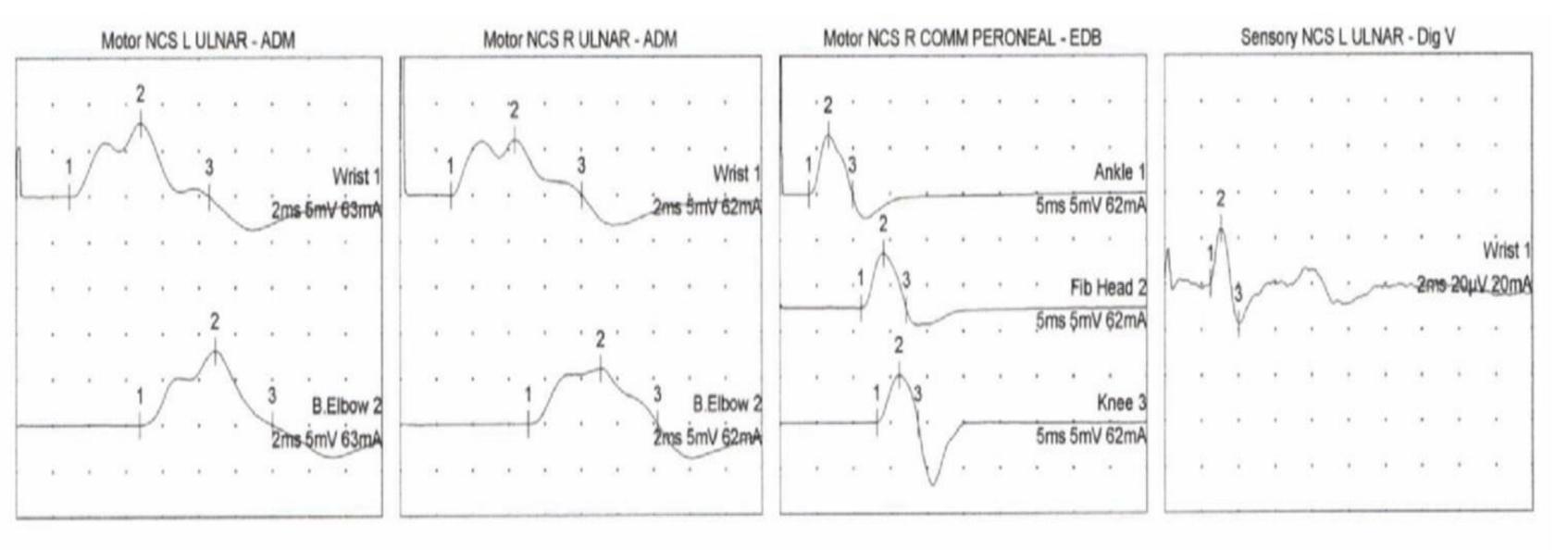
- Neurological exam: wide-based gait.
 Reflexes, sensation, and proprioception were intact.
- **Skin exam:** three tender, subcutaneous nodules on his left arm, left medial thigh and right calf.

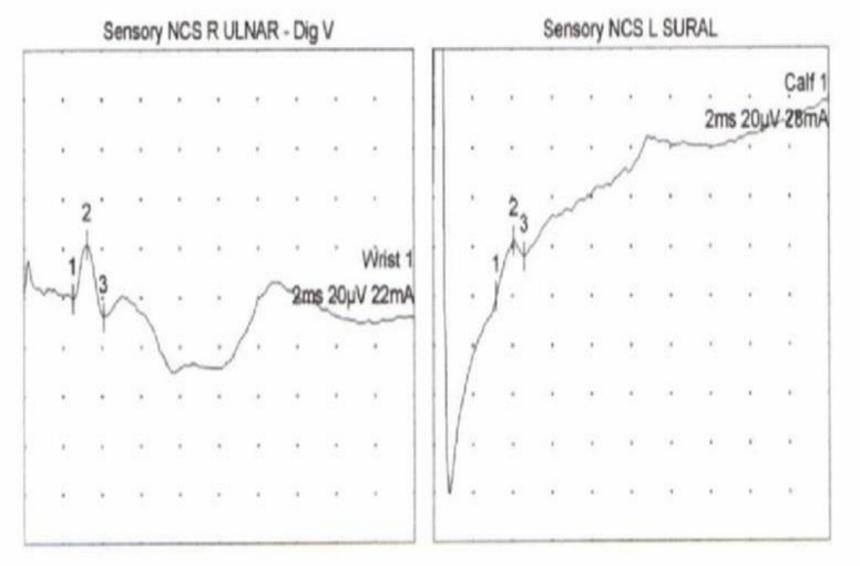
LABS AND IMAGING

Nodular biopsy: granulomatous lobular and septal panniculitis, suggestive of erythema induratum.

EMG studies: Normal distal latency and amplitude of bilateral ulnar nerves and left sural nerve. No electro-diagnostic evidence of peripheral polyneuropathy (Figure 1.)

Figure 1. EMG study:





DISCUSSION

- Gastric syphilis and syphilis panniculitis usually resolve with penicillin treatment (1,2).
- Persistent gastric syphilis (seen in only 1% of cases of secondary syphilis) and dermatologic symptoms following a completed treatment regimen for late syphilis, as presented in our patient's case, indicates the need for further investigation into the irreversible symptoms of neurosyphilis.

DISCUSSION

- Although benzathine penicillin is effective at eradicating treponema pallidum, its inability to reverse pre-existing nerve damage also warrants broader diagnostic indications of lumbar puncture for neurosyphilis diagnosis and treatment, and EMG testing to exclude polyneuropathy.
- Syphilitic patients with residual weakness or paresthesias would benefit from rehabilitative therapy and continued follow up with specialized care to address symptoms.

CONCLUSIONS

- Although late syphilis can present with a variety of systemic manifestations, this particular constellation of neurological, dermatological, and gastrointestinal symptoms denotes an atypical presentation of tertiary syphilis that has not yet been discussed in existing literature.
- Patients presenting with similar symptoms and risk factors should be tested for syphilis as early recognition of symptoms and treatment of syphilis can prevent long term neurologic dysfunction.

BIBLIOGRAPHY

- 1. Mylona EE, Baraboutis IG, Papastamopoulos V, Tsagalou EP, Vryonis E, Samarkos M, Fanourgiakis P, Skoutelis A. Gastric syphilis: a systematic review of published cases of the last 50 years. Sex Transm Dis. 2010 Mar;37(3):177-83.
- 2. Plotner AN, Mutasim DF. A Case of "Syphilis Panniculitis" Caused by Direct Fat Inoculation by *Treponema Pallidum*. Arch Dermatol. 2012;148(2):269-270