GUILLAIN-BARRÉ SYNDROME: THERE IS MORE THAN MEETS THE EYE- A CASE REPORT.

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Background

- Guillain-Barré Syndrome (GBS) is an autoimmune disease with progressive ascending areflexic weakness and mild sensory changes.
- Acute inflammatory demyelinating polyneuropathy (AIDP) is the most common variant (classic GBS).

Case Description

- 71-year-old male with mild progressive bilateral leg and right-sided facial weakness for a week.
- Stroke was ruled out on imaging. Unilateral facial weakness progressed to bilateral facial palsy along with ptosis, diplopia, inability to abduct his left eye, and dysarthria.
- He was diagnosed with AIDP based on his EMG results.
- He completed a course of intravenous immunoglobulin and transferred to acute inpatient rehab to help regain strength, mobility and improve his dysarthria.
- At the time of discharge, he regained lower extremity strength and continued to recover from his facial diplegia and ophthalmoplegia.

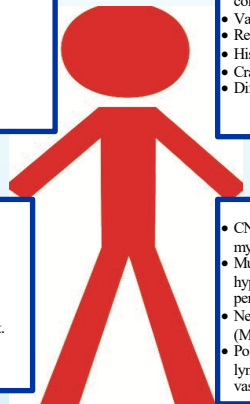
Discussion

- GBS commonly presents with numbness and tingling in the feet or hands; followed by symmetric weakness of extremities.
- Some patients may experience cranial nerve (CN) involvement. Unilateral facial nerve palsy (FNP) has been commonly reported.
- However, our patient had diplegic FNP, which represents less than 2% of all facial palsy cases with has an incidence of 1 per 5,000,000. [1]
- Diplegic FNP is considered unusual when compared to unilateral FNP which is commonly seen in strokes, Bell's palsy or GBS.

Guillain-Barré Syndrome

Signs & Symptoms:
- Pins and needles sensations in hands & feet.
- Ascending symmetric weakness.
- Progresses over hours to days.
- Difficulty walking.
- Hyporeflexia.
- Tachycardia.
- Hypo or hypertension.
- Cranial nerve palsy.
- Difficulty breathing.

Risk Factors:
- Older age.
- Recent infection (e.g campylobacter, EBV, E coli, influenza, HIV).
- Vaccination (influenza or childhood vaccines).
- Recent surgery.
- History of lymphoma, SLE, HIV.
- Cranial nerve palsy.
- Difficulty breathing.



Subtypes
- Acute inflammatory demyelinating polyneuropathy.
- Acute motor axonal neuropathy.
- Acute motor and sensory axonal neuropathy.
- Pharyngeal-cervical-brachial variant.
- Miller Fisher syndrome.

Differential Diagnosis:
- CNS conditions (infection, stroke, transverse myelitis, compression myelopathy, polio).
- Muscle conditions (hypokalemia, hypophosphatemia, inflammatory myopathy, periodic paralysis).
- Neuromuscular junction conditions (Myasthenia gravis, toxicity).
- Polyneuropathy (critical illness, CIDP, lyme's disease, biologic toxins, heavy metals, vasculitis, diabetes mellitus, uremia).

Discussion Continued

- Diagnosing facial diplegia accurately can be challenging.
- The differential diagnosis for bilateral FNP include GBS, diabetes mellitus, infectious mononucleosis, sarcoidosis, human immunodeficiency virus (HIV), Lyme disease, syphilis, and leprosy.[2]
- Imaging is considered to rule out other pathologies.
- In our case, NCS helped establish the diagnosis of GBS. NCS are usually normal within the first two weeks after which, abnormalities consistent with demyelination are seen in classic GBS. [3]

Conclusion

- Bilateral facial nerve palsy is an atypical variant of GBS. In individuals with GBS, intensive rehabilitation improves long-term symptoms and functionality.

References

[1] Teller, D C, and T P Murphy. "Bilateral facial paralysis: a case presentation and literature review." The Journal of otolaryngology vol. 21,1 (1992): 44-7.
[2] Oosterveer, D M et al. "Differential diagnosis of recurrent or bilateral peripheral facial palsy." The Journal of laryngology and otology vol. 126,8 (2012): 833-6. doi:10.1017/S002221511200120X
[3] Morgan, Catherine et al. "Bifacial weakness with paresthesias: Serial nerve conduction studies indicate diffuse demyelinating neuropathy." Muscle & nerve vol. 53,5 (2016): 818-22. doi:10.1002/mus.25028