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Parsonage Turner Syndrome Complicating Multiple Myeloma Therapy: "Nothing to Shrug your Shoulders at"

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INTRODUCTION

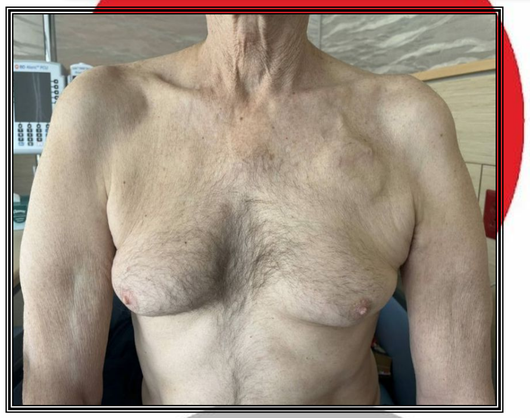
Parsonage turner (PTS) is a rare syndrome characterised by rapidly progressive brachial plexopathy. Commonly associated with post-viral infection or post-vaccination etiologies but very few drug related cases have been reported. We present a case of the syndrome seen in a multiple myeloma patient treated with Bortezomib, Lenalidomide and Dexamethasone.

CASE

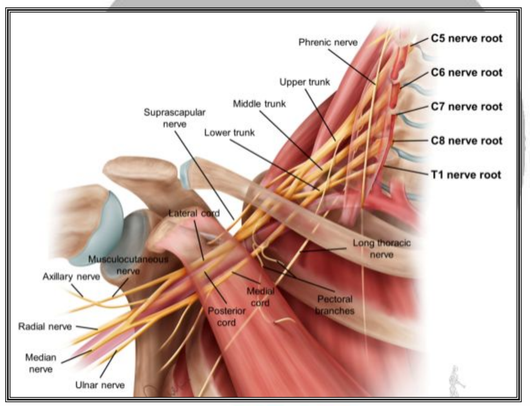
- A 66-year-old man was diagnosed with multiple myeloma based on bone marrow biopsy results.
- Initiated on induction treatment with bortezomib, lenalidomide, and dexamethasone.
- Achieved very good partial response after the 4th cycle but developed acute bilateral shoulder pain followed by severe bilateral arm weakness.
- Could not lift his arms against gravity.
- No sensory deficits

DIAGNOSIS

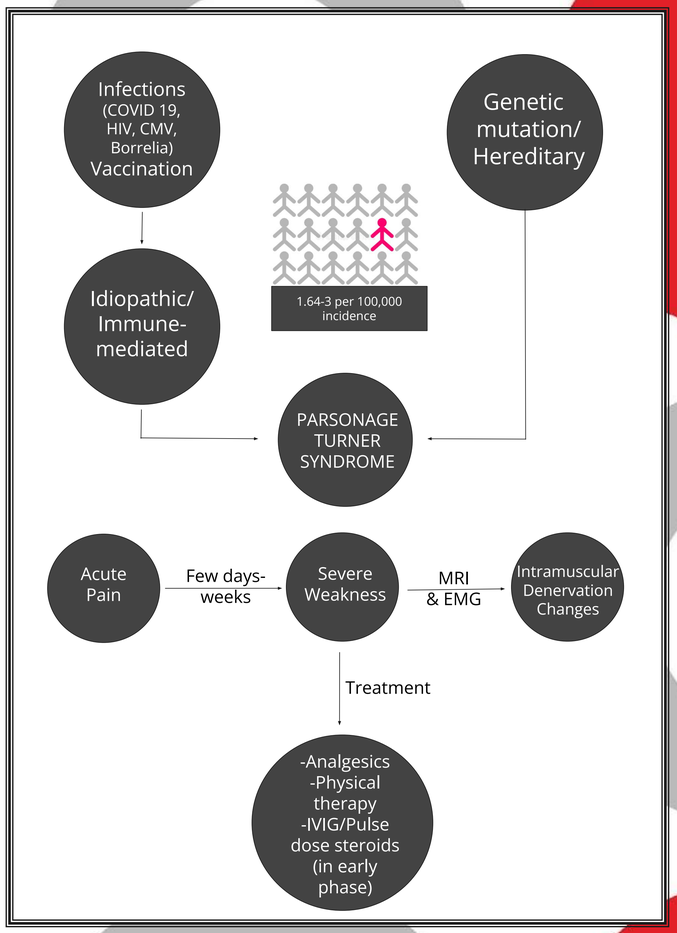
- Inflammatory markers were within normal limits .
- MRI of brain and cervical spine could not be performed due to an incompatible pacemaker.
- CT of brain and spine: No obvious mass or change in chronic lytic lesions to explain presentation.
- EMG findings: severe acute denervation of the deltoids.
- Clinical signs and EMG findings confirmed the diagnosis of PTS.



Severe Bilateral Deltoid atrophy



Brachial plexus most commonly involved



DISCUSSION

- PTS also known as Brachial plexitis
- Drug related aetiology is uncommon.
- Two cases of PTS have been noted in patients who received Bortezomib in combination with other cancer treatment modalities.
- This is unlike the usual peripheral sensory neuropathy seen with Bortezomib.
- Bilateral presentation of Parsonage turner syndrome as seen in our patient has also not been commonly reported
- It is imperative to monitor patients being initiated on Bortezomib for brachial plexopathy and study the immune mechanisms and genetic mutations leading to the same.

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