

The Importance of Early Diagnosis in Parsonage-Turner Syndrome

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Background

- Parsonage-Turner Syndrome (PTS) is a rare disorder; incidence 1.64 cases per 100,000¹
- Initial symptoms include abrupt and severe unilateral shoulder pain that is non-positional in nature
- Weakness replaces pain within days-to-weeks
- Also referred to as idiopathic brachial plexopathy or neuralgic amyotrophy

Case Description

- 62-year-old male presents to ED with three days left shoulder pain without inciting events
- Imaging of shoulder and cervical spine unremarkable
- Discharged from ED with oral steroids and referred to neurosurgery (NSx)

Case (continued)

- Evaluated after several weeks by NSx; diagnosed with cervical spine stenosis, referred to PM&R
- Evaluated after one month by PM&R; pain symptoms replaced by weakness, decreased ROM, and severe wasting of deltoid and supraspinatus muscles
- Diagnostic U/S of left shoulder unremarkable; sent for EMG

Discussion

- PTS often goes misdiagnosed at initial evaluation, either in the ED or by PCP
- This patient's diagnosis was overlooked by both the ED and an additional specialist
- Diagnosis was made over two months after initial presentation

Discussion (continued)

- At the time of diagnosis symptoms had progressed significantly and included severely decreased ROM and severe muscle wasting
- Prolonged course of physical and occupational therapy were required
- Full ROM has been fully achieved after three months of therapy

Conclusion

- Early diagnosis and therapeutic intervention plays a significant role in preventing long-term negative sequela
- A greater emphasis should be placed on recognition of this rare yet easily identifiable syndrome

References

1 – Feinberg JH, Radecki J. Parsonage-turner syndrome. *HSS J.* 2010;6(2):199-205. doi:10.1007/s11420-010-9176-x

Disclosures or Conflicts

- No disclosure or conflicts of interest. No project funding.

EMG Findings

EMG Summary Table		Spontaneous						MUAP			Recruitment	
Muscle	Nerve	Roots	Fib	PSW	Fasc	CRD	Amp	Dur.	PPP	Pattern	Comments	
L. Deltoid	Axillary	C5-C6	+1	None	None	None	+1	Normal	Normal	Normal	Increased	
L. Biceps brachii	Musculocutaneous	C5-C6	None	None	None	None	Normal	Normal	Normal	Normal	Increased	
L. Triceps brachii	Radial	C6-C8	None	None	None	None	Normal	Normal	Normal	Normal	Normal	
L. Flexor carpi radialis	Median	C6-C7	None	None	None	None	Normal	Normal	Normal	Normal	Normal	
L. Cervical paraspinals (mid)		-	None	None	None	None	Normal	Normal	Normal	Normal	Normal	
L. Cervical paraspinals (low)		-	None	None	None	None	Normal	Normal	Normal	Normal	Normal	
L. Supraspinatus			None	None	None	None	Normal	Normal	Normal	Normal	Normal	
L. trapezius			None	None	None	None	Normal	Normal	Normal	Normal	Normal	

- Abnormal findings suggestive of possible brachial plexopathy at the upper trunk distal to the branching of suprascapular nerve