

Tardive Dystonia and the Perils of Telehealth

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Background

- Tardive dystonia is an extrapyramidal syndrome caused by exposure to dopaminergic receptor antagonists
- It is often misdiagnosed and if not recognized and treated appropriately, symptoms can worsen or remain indefinitely

Case Presentation

- 60 year old female presents with progressive and widespread muscle weakness for three months
- Recently established with telehealth psychiatry practice for treatment of sensation of unseen hair wrapping around her body
- Previous diagnosis of generalized anxiety disorder, past medication trials of SSRIs only
- Visits were telephone only without video
- Prescribed overlapping courses of high doses of several antipsychotics: risperidone, olanzapine, haloperidol, quetiapine, fluphenazine
- **Developed progressive movement changes** as medications increased:

Outside Hospital Course

- Brought to ER by husband
- Antipsychotics gradually titrated down without improvement

Unsuccessful Medication Trials

Lorazepam	Diazepam
Dantroline	Cyproheptadine
Amantadine	Benzotropine
Baclofen	Carbidopa-levodopa

Unremarkable Diagnostics

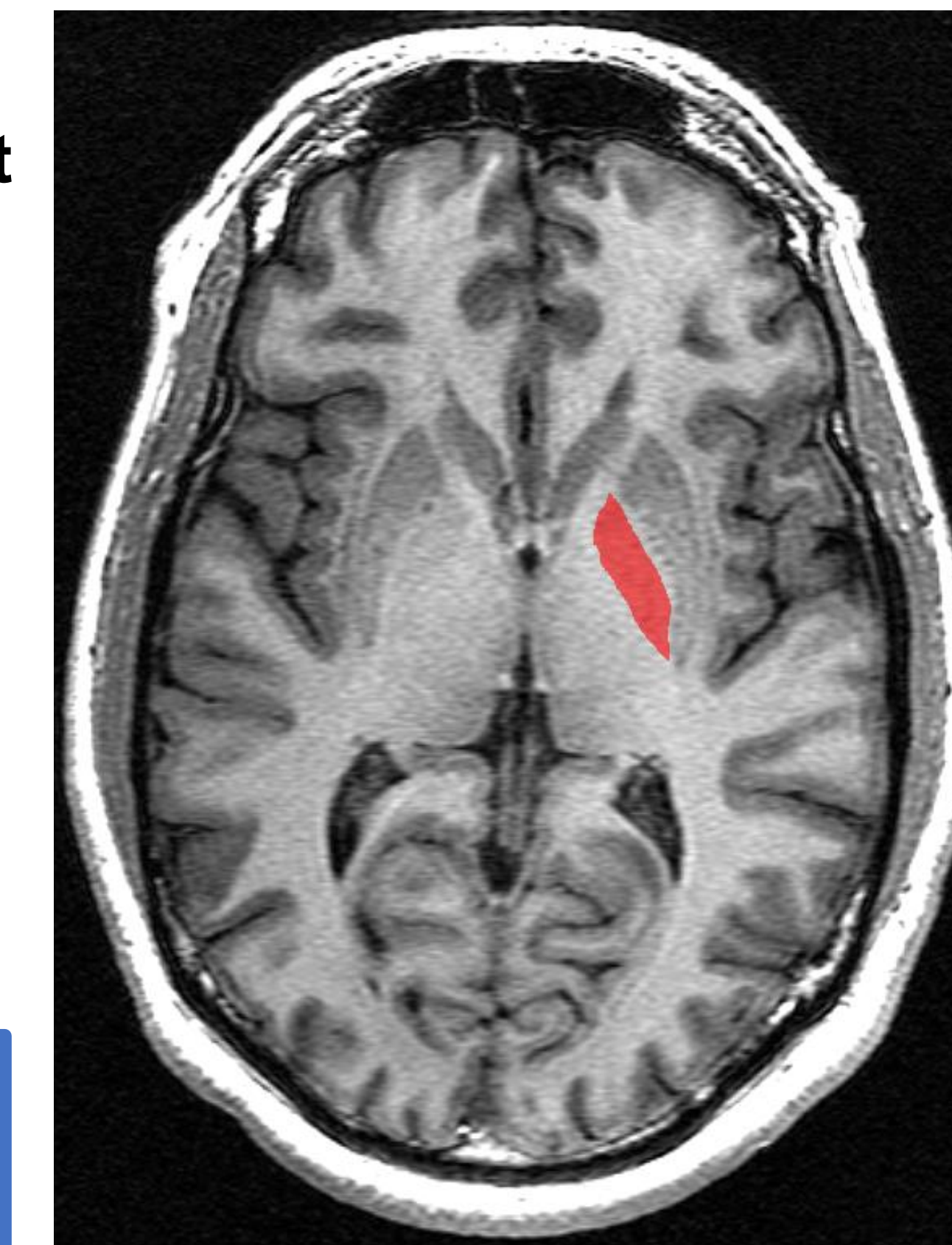
EEG
Brain MRI
LP
Serum/CSF autoimmune encephalitis panels
Serum/CSF myelopathy panels

Complications

Hypoxic respiratory failure requiring tracheostomy
Persistent dysphasia requiring PEG placement
Worsening pressure ulcers on feet and osteomyelitis

Yale New Haven Hospital Course

- Botulinum toxin injections → small improvement in movement of upper extremities and jaw
- Gabapentin → partial improvement in hair wrapping sensation, now thought related to paresthesia
- Exam under anesthesia with rocuronium for paralysis → moderate improvement in proximal limb range only
- ECT and DBS considered → unlikely to be helpful due to permanent contractures
- Multidisciplinary review board for palliative surgical therapies → bilateral pallidotomy
- **Minimal improvement** of extremity and jaw movement
- **Long term placement**



Example of transverse section of globus pallidus

Discussion

- Early recognition and intervention is critically important for tardive dystonia¹
- In this case, symptoms were progressive and worsened rapidly with continued addition of antipsychotic agents
- By the time symptoms were recognized, she had developed severe and permanent complications, with minimal response to first line therapies and palliative surgical intervention²

Conclusion

- When psychiatric care is provided through telehealth only and without physical exam, severe complications such as tardive dystonia can be misdiagnosed and lead to permanent debilitation

References

1. Burke, R.E., Fahn, S., Jankovic, J., Marsden, C.D., Lang, A.E., Gollomp, S., & Ilson, J. (1982). Tardive dystonia: late-onset and persistent dystonia caused by antipsychotic drugs. *Neurology*, 32(12), 1335–1346. <https://doi.org/10.1212/wnl.32.12.1335>
2. Factor S.A. (2020). Management of Tardive Syndrome: Medications and Surgical Treatments. *Neurotherapeutics: the journal of the American Society for Experimental NeuroTherapeutics*, 17(4), 1694–1712. <https://doi.org/10.1007/s13311-020-00898-3>

