Diabetes insipidus during D-Penicillamine treatment of a Wilson disease patient

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INTRODUCTION:

D-Penicillamine side-effects require treatment interruption in approximately 30% of cases.

Most common: neurologic worsening, hematological, autoimmune and nephrotoxicity.

CASE PRESENTATION:

History:

2001	Hepatic Wilson disease
2010	Normal brain MRI
2013	Child A liver cirrhosis, grade I esophageal varices
2013	Hypothyroidism

↓ Treatment overlooked

2014	Bradikinesia

↓ D-Penicillamine 250 mg qd

Neurological examination:

Bilateral clubfoot dystonia
Myoclonic jerks of lower limbs
Unsteady broad-based gait
Bilateral intention tremor
Hypomimia
Severe hypophonia
Agraphia
Sub-fever

Diagnoses at discharge:

Untreated hypothyroidism
Acute maxillary rhinosinusitis
Compensated cirrhosis
Grade II esophageal varices
Grade A esophagitis

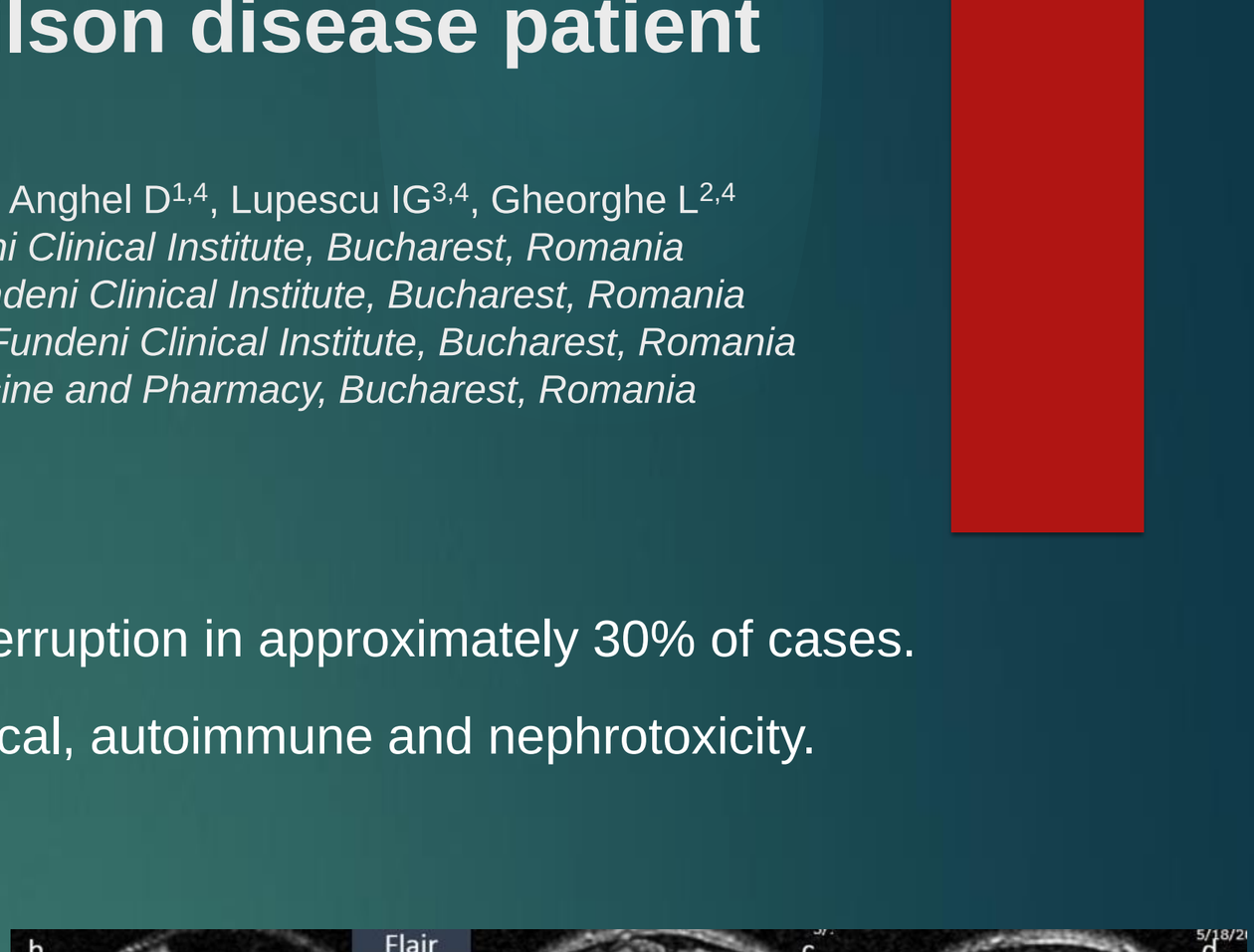
↓ Clonazepam + Gabapentin
D-Penicillamine 250 mg qid

Neurologic worsening, polyuria, polydipsia

~~Renal causes~~
~~Pituitary insufficiency~~
Hypothalamic autoimmune

Brain MRI:

Normal neurohypophysis
Bilateral signal abnormalities involving the basal ganglia, thalamus and upper brainstem



↓ D-Penicillamine removed
Trientine initiation

Polyuria and polydipsia improvement
Neurologic worsening

↓ Kinetotherapy, speech therapy
Trientine unavailable
D-Penicillamine initiation

Neurological examination (2):

Dystonic flexion of trunk and limbs
Inability to walk
Anarthria

Gastroenterological examination:

No liver transplant indication – severe neuropsychiatric disorder

Treatment:

D-Penicillamine	250 mg qid
Zinc	50 mg bid
Diazepam	2.5 mg tid + 5 mg bid
Quetiapine	50 mg qd
Baclofen	5 mg bid
Trihexyphenidyl	0.5 mg bid
Ibuprofen	400 mg tid

CONCLUSIONS:

1) Treatment remains limited in advanced phases
2) Diabetes insipidus occurred during D-Penicillamine treatment