

Neuropsychiatric Signs and Symptoms Improvement after Diagnosing and Treatment of Wilson Disease among Idiopathic Psychosis Patients

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Wilson disease is a sporadic inherited autosomal recessive disease which occurs in approximately 0.5 cases per 100000 inhabitants [1,2]. In Wilson disease, defective incorporation of copper into apoceruloplasmin leads to the impaired copper metabolism, so consequent copper intoxication [3]. Wilson Disease may be predominantly hepatic, neurological or psychiatric, and manifestations of disease may range from an asymptomatic state to life-threatening fulminant hepatic failure [4,5].

In my clinical practice, I followed up 10 patients diagnosed with Wilson disease who present neuropsychiatric manifestations. Patients' age ranged from 33 to 45.6 of individuals were men and 4 of them were women.

Mental status examination included my clinical observations and descriptions given by patients were provided for all 10 patients which is showed in table below.

On mental status examination, patients found to have delusion with grandiose, persecutory, and reference contents or bizarre delusions, Hallucination and paranoia.

9 patients had a diagnosis of delusional disorders, 5 patients had a diagnosis of violently behavior and 8 individuals had a diagnosis of aggressive behavior. Diagnoses of third person perspective were made according to the DSM-VI criteria and 6 individuals represented third person perspective. Since Wilson disease is a rare disease and the diagnosis of it is too difficult, inclusion criteria were one of the previously mentioned diagnoses and the presence of laboratory features (copper in serum, serum ceruloplasmin) proposed by the working party at the 8th International Meeting on Wilson disease held in Leipzig (2001) [4,6]. Therefore, serum ceruloplasmin level and copper in serum was checked for all patients. So, on the basis of clinical manifestations and laboratory findings, a diagnosis of Wilson's disease was made. All patients were on antipsychotic medication at the time of our study. Every individual was prescribed D-penicillamine and zinc as mainstay of therapy for Wilson disease. Following up of individuals indicated improvement in neuropsychiatric manifest signs and symptoms.

Data's are summarized in tables below.

Behavioral and Psychiatric Features before Wilson Treatment										
Patients Num	1	2	3	4	5	6	7	8	9	10
Hallucination	P	P	A	A	A	A	p	P	A	P
Delusion	P	P	p	P	P	p	p	P	p	A
Third person	P	A	P	A	A	P	A	P	P	P
Violently Behavior	P	A	P	P	A	A	P	A	A	P
Aggressive Behavior	P	P	A	P	P	P	A	P	P	P
Thought Broadcasting	A	P	A	A	A	P	A	A	P	P
Paranoia	A	p	P	P	P	P	A	P	P	P

P: Present; A: Absent.

Behavioral and Psychiatric Features after Wilson Treatment										
Patients Num	1	2	3	4	5	6	7	8	9	10
Hallucination	A	A	A	A	A	A	p	A	A	A
Delusion	A	P	A	A	P	A	A	P	A	A
Third person	P	A	P	A	A	P	A	A	A	A
Violently Behavior	P	A	A	P	A	A	P	A	A	P
Aggressive Behavior	A	A	A	A	P	A	A	P	A	P
Thought Broadcasting	A	P	A	A	A	A	A	A	P	A
Paranoia	A	A	A	P	A	A	A	P	A	A

P: Present; A: Absent.

Patients Num	Sex	Age
1	M	35
2	M	39
3	M	36
4	M	43
5	M	40
6	M	45
7	F	34
8	F	37
9	F	41
10	F	33

Conclusion

After Wilson treatment, according to tables below, patients’ psychiatric symptoms have been controlled easier and convinced us to design more widespread studies on Wilson disease.

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