

# DYSAUTONOMIA TREATMENT IN EHLERS-DANLOS SYNDROME TYPE III PATIENTS. PRELIMINARY STUDY



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**Background/Purpose:** The purpose of this study was to evaluate the results of a Dysautonomia treatment in a short period of time, asses compliance and possible side effects. Dysautonomia generally goes undiagnosed, and usually the treatment is not well carried out by patients.

**Method:** Forty seven Ehlers-Danlos type III (EDS-III) patients were studied over a two month period, all under a 0.1 mg per day Fludrocortisone treatment. Patient indications included adding 6 to 9 grams of salt per day to the diet, increasing fluids intake until the urine becomes clear like water, including electrolyte beverages, increasing the physical activity, and the use of elastic stockings. The diagnosis of Dysautonomia was clinical. Patients were evaluated by the same physician, and reevaluated within a two month period of time. Age Range 11 to 58, Average Age 27.7. Females 39 (83%).

**Results:** 1751 patients had EDS-III. BSc negative: 55.1%. Dys positive: M 26.5%, F 52.7%. Group A: M 56.1%, F 79.5%. Group B: M 20.1%, F 46.8%.

A.- Blood pressure: basal and with treatment.

Systolic BP	90	100	110	120	130	140
Basal BP		10	14	19	3*	1*
BP (With treatment)	1	11	19	8	5	3

\* these patients had low BP at home.

B.- Compliance with treatment

Prescribed Measures	Number of Patients	Complied with Treatment
Salt intake	22	46.8 %
Liquid intake	23	48.9 %
Electrolytic beverages intake	12	25.5 %
Elastic stockings usage	12	25.5 %
Physical activity	33	70.2 %

C.- Improvement with treatment.

a.- Improvement of Chronic Fatigue.

Improvement	Number of pts	Results
<30 %	8	17 % Bad
30-60 %	15	32 % Regular
60-80 %	18	38 % Good
80-100 %	6	13 % Excellent

Improvement in Chronic Fatigue was noted in 39/47 (83%), it was good or excellent in 24/47 (51%).

b.- Improvement of other symptoms

	Never had	Improved	Worsen	No Change	Improvement
Syncope	33	13	1	0	93%
Dizziness	19	25	3	0	89%
Presyncope	18	24	5	0	83%
Head Ache	3	31	11	2	70%
Cramps	22	16	3	6	64%
Cold Intolerance	1	29	11	6	63%
Memory	1	23	1	22	50%
Concentration	0	23	2	22	50%
Disorientation	14	16	0	17	49%

The vast majority of the patients (91.5%), showed no side effects to the treatment, such as, weight gain, moon face, fluid retention, hypokalemia, cramps, polyuria, hypertension or swelling of hands or feet.



## Conclusions:

- Dysautonomia was more frequent in females, as observed in other studies (83%). It is important to note that it affects mainly young patients, 64% of them were less than 30 y/o and only 15% were 40 y/o or older.
- Improvement was seen in Syncope (93%), Dizziness (89%), Chronic Fatigue (83%), and Presyncope (83%) and to a lesser degree improvements in: Headaches, Cold intolerance, Memory and Concentration.
- Only 36% of the patients complied fully with the general measures of the Dysautonomia treatment, which could explain why there was no significant increase in blood pressure with treatment in the short period studied.
- It is important to highlight the fact that there were no significant side effects in 92% of the patients.
- Further studies with longer period of observation are necessary, to validate the results of this preliminary study.