

# Medium-term Follow up of Patients with Vasovagal Syncope



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## Objective:

In this study, we aimed to evaluate 3-year mid-term follow-up results that consist of treatment response, frequency of recurrences, predisposing factors that cause recurrence and prognosis in patients with syncope and presyncope. We also aimed to obtain useful information that will contribute to follow-up and treatment of these patients.

## Methods:

285 consecutive patients diagnosed with syncope between January 2008 and December 2009 were enrolled into study. Patients files were reviewed retrospectively. Etiology of syncope in these patients were evaluated. 114 patients were diagnosed with vasovagal syncope. Recurrences and related conditions were recorded.

## Results:

Vasovagal syncope 51.2 %, pseudo-syncope 22.1%, syncope with neurological origin 14.4 %, cardiac syncope 2,1 % and unexplained syncope 10.2 % were found in 285 patients that were examined for syncope. 114 patients diagnosed with vasovagal syncope. Of those 58.8 female %, 41.2 % were male. Female to male ratio was 1,4 . Mean age at presentation  $11.7 \pm 2.5$  years, the mean age of first syncope  $11.3 \pm 5.2$  years, and the mean duration of follow-up  $42.8 \pm 3.4$  months were found. During the follow-up period recurrence of syncope was found in 31 patients (27.2%). Any effects of sex, absence or presence of prodromal symptoms, response type to tilt table test at the time of diagnosis was not determined on the recurrence and type of syncope . Significant decrease was seen in the number of syncope attacks after the tilt table test. The recurrence of syncope was observed in 15 of 26 patients that were treated with beta blockers, whereas 16 of 88 untreated patients. Recurrence of syncope were found more frequent in patients with drug therapy.

Table 1. Demographic and clinical characteristics of the patients

	n or mean $\pm$ SD
Gender (F/M)	67/47
Age(years)	11.7 $\pm$ 2.5
Age at initial syncope(years)	11.3 $\pm$ 2.5
Follow-up (months)	42.8 $\pm$ 3.4
Prodromal factors (n)	60
Position during syncope (n)	
Standing(n)	88
Sitting(n)	15
Standing and sitting (n)	11
Injury during syncope(n)	5
Number of syncope at admission	
1	47
2	33
>3	34
Recurrence	
Yes	31
No	83

Table 2. Results of tilt table test

Type of Response	n	(%)
Cardioinhibitory	14	12.3
Vasodepressor	1	0,9
Mixt type	11	9.6
POTS	33	28.9
Negative	55	48.2
Total	114	100

Table 3. Comparison of syncope recurrences between Tilt table test (+) and (-) of the patients

	(+)	(-)
n	59	55
Number of syncope *	0.54 $\pm$ 1.08	0.27 $\pm$ 0.56
Recurrence (n)		
Yes <sup>§</sup>	19	12
No	40	43

\*: mean $\pm$ SD, <sup>§</sup>: p>0.05; n: number of the patients

Table 4. Comparison of patients with and without medical treatment

Medical treatment	(+)	(-)
n	26	88
Number of syncope at diagnosis	2.96 $\pm$ 2.18	2.06 $\pm$ 1.32
Patients with recurrences (n)*	15	16

\*:p=0.001,n: number of the patients

## Conclusion:

In childhood period, education and recommendations, increasing fluid and salt intake are successful form of treatment for vasovagal syncope. In patients with recurrent syncope attacks  $\beta$  blocker treatment is used besides the recommendations. But effect of the beta blocker therapy for preventing the recurrence is limited. For this reason, medication should be used only in cases with frequently repeated vasovagal syncope attacks