

**P3474 | BEDSIDE****Prognostic significance of dysrhythmias in patients with familial amyloid polyneuropathy**

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**Background:** Rhythm disturbances and conduction defects are common consequences of cardiac amyloid infiltration in familial amyloid polyneuropathy (FAP) V30M-TTR. The occurrence of dysrhythmias appears to increase with the severity of the disease but its prognostic value is still unknown.

**Purpose:** To evaluate the occurrence of arrhythmias according to the patient's age and the duration of symptoms and to analyze its prognostic value.

**Methods:** Prospective observational study of consecutive patients with FAP V30M-TTR who underwent annual cardiac evaluation including Holter recording.

**Results:** During a median follow-up of 55 months, 223 patients were evaluated (44±14 years; 54.3% female) and a total of 777 Holter recordings were performed. It was found that with increasing age, the number of premature supraventricular (Pearson R=0.246, P<0.001, Spearman's Rho=0.246, P<0.001) and ventricular (Pearson R=0.244, P<0.001, Spearman's Rho=0.221, P<0.001) contractions increased, while the mean heart rate decreased (Pearson R=-0.448, P<0.001, Spearman Rho=-0.43, P<0.001).

On the other hand, with increasing in symptoms duration, the number of premature ventricular contractions increased significantly (Pearson R=0.144, P=0.001, Spearman's Rho=0.165, P<0.001) (but not supraventricular) and the mean heart rate decreased (Pearson R=-0.153, P=0.001, Spearman's Rho=-0.185, P<0.001). Multivariate Cox regression analysis showed that the independent predictors of mortality were age (HR: 1.073, 95% CI 1.055–1.090), the presence of brady (HR: 1.615, 95% CI 1.071–2.436, P<0.001) or tachyarrhythmias (HR:

1.255, 95% CI 1.255–3.462,  $P < 0.001$ ) and the number of premature supraventricular contractions (HR: 1.439, 95% CI 1.168–1.774,  $P < 0.001$ ).

**Conclusions:** Holter monitoring should be integrated in the periodic evaluation of FAP V30M-TTR patients. The presence of brady or tachyarrhythmias and the number of premature supraventricular contractions are associated with unfavorable prognosis in these patients and should be treated timely.