

of ionic, fluid and hemodynamic changes. Despite this, there are few studies evaluating intradialytic arrhythmias. The aim of our study was to characterize and feature arrhythmias prevalence during hemodialysis (HD) sessions and find out which clinical and analytic factors, as well as dialysis parameters, may be related with their occurrence.

**METHODS:** A prospective cohort study was conducted between October and December 2017. Patients hospitalized in several departments of our hospital who needed to perform HD in our Dialysis Unit, were evaluated for intradialytic arrhythmias using a telemetry system. Registers of arrhythmias were evaluated and classified. Auricular fibrillation, non-sustained ventricular tachycardia and ventricular tachycardia were considered serious arrhythmias. We gathered information about: patient demographic data, past medical history, drugs under course in the moment of HD session, echocardiographic parameters, parameters of dialysis prescription, type of vascular access, hemodynamic parameters during HD and plasmatic analytic evaluation before and after HD. Data analysis was fulfilled using SPSS® (version 20).

**RESULTS:** Thirty-two patients were randomly included. Fifty six percent (n=18) were male and the mean age was  $73,8 \pm 8,9$  years. Thirty-four percent (n=11) were diabetic, 97% (n=31) had hypertension and 81% (n=26) had dyslipidaemia. Thirty-seven percent (n=12) had known ischemic heart disease. Eighteen patients (56%) had CKD 5HD and attended a chronic dialysis program and 14 patients (44%) had acute kidney injury (13 with previous CKD). Twenty patients (63%) had de novo arrhythmias (supra-ventricular tachycardia, supraventricular extrasystoles [SVET] and ventricular extrasystoles [VES]), and 11 (34%) had serious arrhythmias. One patient died during dialysis session, initially it was recorded SVET, then frequent VES and after that escape ventricular rhythm and asystole. Of our statistical analysis we found out that medical history of ischemic cardiac disease was associated with occurrence of serious arrhythmias ( $p < 0.001$ ), as well as beta-blocker therapy in the moment of HD ( $p = 0.034$ ). No echocardiographic parameter had association with intra-dialytic arrhythmias. The distribution of dialysis blood flow rate was different between patients who had and who had not serious arrhythmia ( $330 \pm 88$  mL/min vs  $280 \pm 56$  mL/min,  $p = 0,027$ ). No other dialytic parameter, intradialytic hypotension or type of vascular access was associated with occurrence of intradialytic arrhythmias. The distribution of plasmatic troponin T values before HD session was different when compared the group who had and the group who had not serious arrhythmia (TroponinT before HD:  $0,71 \pm 1,30$  mg/dL vs  $0,09 \pm 0,07$  mg/dL,  $p < 0.001$ ).

**CONCLUSIONS:** De novo and serious arrhythmias are frequent during hemodialysis sessions. In our study, known history of ischemic heart disease, beta-blocker drugs, increased dialysis blood flow rate and increased plasmatic TroponinT values before HD were associated with occurrence of intradialytic arrhythmias.

FP554

#### INTRADIALYTIC ARRHYTHMIAS AND ITS ASSOCIATION WITH CLINICAL, ANALYTIC AND DIALYSIS PARAMETERS: WHAT SHOULD WE KNOW ABOUT IT?

Catarina Eusébio<sup>2</sup>, Miguel Moz<sup>1</sup>, Patrícia Neto<sup>2</sup>, Sofia Cerqueira<sup>2</sup>, Natália Silva<sup>2</sup>, Catarina Prata<sup>2</sup>, Ilídio Queirós<sup>1</sup>, Teresa Morgado<sup>2</sup>

<sup>1</sup>Cardiology, Centro Hospitalar Trás-os-Montes e Alto Douro, Vila Real, Portugal and

<sup>2</sup>Nephrology, Centro Hospitalar Trás-os-Montes e Alto Douro, Vila Real, Portugal

**INTRODUCTION AND AIMS:** Renal failure is associated with increased cardiovascular risk. About 45% of deaths in these patients are of cardiovascular etiology and two thirds of these are attributed to arrhythmias. Dialysis patients usually have multiple cardiovascular risk factors as well as ischemic heart disease. It is known that these patients have an increased arrhythmogenic potential, particularly during dialysis, consequence