EFFECT OF SUPPLEMENTED INTAKE OF DOCOSAHEXAENOIC AND EICOSAPENTAENOIC FATTY ACIDS ON VENTRICULAR ARRHYTHMIAS IN CORONARY HEART DISEASE PATIENT’S WITH IMPLANTABLE CARDIOVERTER DEFIBRILLATOR

ACC Poster Contributions
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Background: Most compelling epidemiological, experimental and clinical evidence for eicosapentaeanoic acid (EPA) and docosahexaenoic acid (DHA) effect on the reduction of cardiovascular mortality (in particular its ability to reduce the risk of sudden death) focuses on the anti-arrhythmic mechanism of action. We sought to study the antiarrhythmic effect by a randomized crossover placebo controlled study in post myocardial infarction (MI) ICD patients.

Methods: 105 post MI patients with ICD received 3.6 gram of EPA and DHA and placebo for 6 months each at a random order with a 4-month washout period between treatments. 87 patients completed the 16 months study protocol. We looked at arrhythmic episodes stored by the ICDs.

Results: No differences were found in mean number of NSVT episodes or number of patients experiencing NSVT episodes between placebo and fish-oil treatment (3.24 ± 15.1 vs. 1.09 ± 2.7, p= 0.170 respectively ). 23 patients in each one of the fish-oil and the placebo period experienced NSVT episode. No difference was found between mean number of VT episodes terminated with ATP or number of patients experienced VT episodes terminated with ATP between placebo and fish-oil treatment (2.8 ± 13.7 vs. 0.5 ± 2.1, p=0.077 respectively and 16 vs. 13 patients p=0.627).

Conclusions: This study failed to show neither protective effect nor proarrhythmic effect of fish-oil in post MI patients with ICD. Our data do not support fish oil supplementation to reduce arrhythmic events in patients with ICD.