ation. Family 3: male, R545H pathogenic variant, had AF diagnosed at age 27, underwent a successful AF ablation without recurrences in three years of follow-up. There was no family history of AF, DCM or PM. His father died suddenly at age 67. In all patients of these three families there was no evidence of neuromuscular involvement and CK level was within normal. The mean follow up was 9 years.
Conclusion: In this study, 2 variants in the LMNA gene were found in patients with AF. Our findings call attention to this initial presentation of apparently lone AF and emphasize the importance of the genetic testing in these special situations.

P5376
Tentative screening criteria for short QT interval among children and adolescents

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Background: While the prevalence of short QT syndrome (SQTS) in children and adolescents is low, early detection is important because SQTS is associated with atrial or ventricular fibrillation and a propensity for cardiac arrest. In Japan, a school-based electrocardiogram (ECG) screening program has been conducted for 1st (6-year-old), 7th (12-year-old), and 10th (15-year-old) graders since 1994. This screening program has already helped detect a case of SQTS.
Purpose: The present study was to determine the tentative screening criteria of short QT interval in children and adolescents with manually measured QTc values, using data obtained in the screening program conducted in our city.
Methods: A total of 75,040 digitally stored electrocardiograms (ECGs) of participants in a school-based ECG screening program were obtained between 2009 and 2013. Based on the data obtained by automatic measurement, ECGs with a QTc value ≤10th percentile for each sex and grade were selected. Three consecutive QT/RR intervals of the selected ECGs were manually measured and corrected by Bazett's formula. The tentative screening criteria were developed for the estimated prevalence of SQTS, which was deduced based on the following facts and assumptions; 1) the probability of diagnosing long QT syndrome in the 7th graders is approximately 1/1000; 2) the numbers of patients with SQTS in the large series of articles was less than one thirtieth compared with those with LQTS; 3) exact numbers of patients with SQTS may be larger in future than now. Thus, the prevalence of SQTS was estimated to be between 1/30,000 and 1/10,000 in young subjects. To exclude the possibility of false negative results, we assumed that the prevalence of short QT interval was between 1/5,000 and 1/2,000.
Results: A total of 75,040 subjects participated in the screening program, including 26,518 1st graders (M/F=13,384/13,134), 28,072 7th graders (14,038/14,034), and 20,450 10th graders (9,884/10,566). ECGs of participants with a QTc value ≤10th percentile by automatic measurement were 2581 1st graders (1296/1285), 2792 7th graders (1400/1392), and 2018 10th graders (979/1039). According to the prevalence and frequency distribution charts, the tentative QTc values to be used in screening for short QT interval was estimated as follows; 325, 315, and 305 ms for 1st, 7th, and 10th grade males, respectively; 320, 320, and 315 ms for 1st, 7th, and 10th grade females, respectively. When using the tentative screening values suggested above, the prevalence of children and adolescents who might be screened was 1/2230, 1/4679, and 1/2471 in 1st, 7th, and 10th grade males, respectively, and 1/2627, 1/4678, and 1/2113 in 1st, 7th, and 10th grade females, respectively.
Conclusion: The tentative screening values proposed in the present study may be useful for early detection of SQTS. For primary screening, the QTc values for short QT interval should be adapted according to grade and sex.

POSTER SESSION 6
PREVENTIVE CARDIOLOGY/LIPIDS

P5377
Disconcordance between ESC prevention guidelines and observed lipid profiles in patients with known coronary artery disease

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Background: Current ESC guidelines recommend lipid lowering therapy in subjects with known coronary artery disease (CAD) with treatment goals of 70mg/dl for LDL-cholesterol, whereas a goal of <100mg/dl was used before 2011.
Purpose: We aimed to describe whether updated LDL-goals in patients with known CAD led to a change in lipid profile over time.
Methods: We retrospectively included patients with known CAD, admitted to the West German Heart and Vascular Center in the years of 2009–2010 (n=500), 2012–2013 (n=500), and 2015–2016 (n=500). LDL-cholesterol levels and intensity of stain therapy (based on dosage and type of statin) at admission were assessed from all available hospital records. Lipid levels at the different time-points as well as rate of accordance to guidelines (<100 for 2009–2010, <70 for 2012–2013 and 2015–2016) were evaluated.
Results: Overall, 1500 subjects (mean age: 68.4±11.2 years, 75.8% male) from 813 attending primary care physicians in 98 German cities were included. Mean LDL-level was 98.0±35.7mg/dl, whereas 34.1% reached LDL targets according to guidelines as applied at each time-point. Mean age and BMI increased with time period (age: 67.1±10.8 to 69.6±11.7, p=0.005, BMI 27.5±4.4 to 28.1±5.4, p=0.089, in 2009–2010 and 2015–2016, respectively), while rate of hypertension (≥90%) was high at all periods. Reduction of LDL goals in 2011 lead to an initial decrease in LDL cholesterol from 98.3±33.4mg/dl in 2009–2010 to 93.9±36.3mg/dl in 2012–2013 (p=0.045), but this effect was no longer present in 2015–2016 (101.6±36.6mg/dl, p=0.17). Likewise, rate of patients meeting recommended LDL-thresholds decreased (2009–2010: 56.6%, 2012–2013: 25.4%, 2015–2016: 20.2%, p<0.0001 for trend). In accordance, the use of statin medication decreased over time (93.6% in 2009–2010 to 83.7% in 2015–2016, p<0.0001). While use of medium intensity statins was most frequent (69.4%), only 37.1% of patients in this group reached LDL-targets according to guidelines. Only 60 patients received a non-statin lipid-lowering drug at any time-point (18 patients as primary lipid-lowering therapy, 42 patients as combination with statins). Patients on both statin and non-statin therapy reached LDL-targets slightly more frequent as compared to patients with statins alone (38.1% vs. 34.0%, p=0.62), however, the difference did not reach statistical significance due to the low absolute numbers.
Conclusion: In a large clinical cohort of patients with known coronary artery disease, reduction of LDL-targets in ESC-guidelines in 2011 led to an initial decline in LDL cholesterol, while this effect was attenuated over time with the majority of patients missing treatment goals. More aggressive lipid lowering treatment is warranted to exhaust its effect in secondary prevention of patients with CAD.

P5378
Statin treatment after acute coronary syndrome: long-term persistence and reasons for non-persistence

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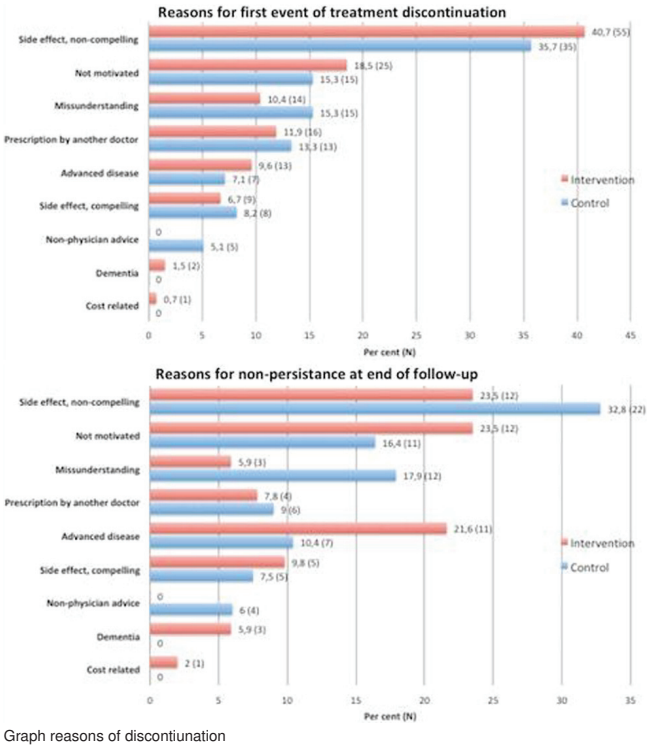
Background: Secondary prevention after acute coronary syndrome (ACS) is crucial to prevent recurrent events. Multiple studies however show that patients often end treatments and for reasons unknown. Our aims in this study were to perform a prospective follow-up of persistence to statin treatment in a population based patient cohort after ACS, to explore the reasons for discontinuation, and to determine whether a nurse-based follow-up could improve persistence.
Methods: We studied patients recruited between 2010–2014 in the ongoing randomised controlled NAILED-ACS trial. All patients admitted with ACS at our County Hospital were eligible and exclusion criteria limited to inability to adhere to the study concept or participation in another trial. We randomised participants either to an intervention group with nurse-based telephone follow-up or to a control group with follow-up by a general practitioner (usual care). All participants were interviewed and screened yearly for blood pressure and blood lipids. The intervention group also got yearly counselling on healthy living and individualised titration of medicines to reach target values for blood pressure and blood lipids.



Graph reasons of discontiunation