Background and Aims : The relationship between Serum Uric Acid (SUA) and Metabolic Syndrome (MS) is still debate. Whether SUA level is part of MS diagnosis or just a marker of an unfavourable metabolic profile has not been demonstrated. Besides it's unknown whether SUA's addition to MS definition makes a difference in terms of prognosis. In our study we focused on evaluating in a group of hypertensive patients, the correlation between MS diagnosis and SUA defined with classic cut-off ($\geq$6 mg/dL for women and $\geq$7 for men) and URRAH's threshold (>5.6 mg/dL for both sexes).

Methods: We enrolled 473 Hypertensive patients followed by the Hypertension Unit of San Gerardo Hospital (Monza, Italy), in which SUA was measured. Patients with Hyperuricemia were identified according to the two different thresholds. NCEP-ATP-III criteria were used for diagnosis of MS.

Results: MS was diagnosed in 33.6% while Hyperuricemia was found in 14.8% of subjects according to traditional cut-off and 35.9% according to URRAH study's cut-off. Hyperuricemia and MS coexist in 9.7% (traditional cut-off) and 17.3% (URRAH's threshold) of the population. Hyperuricemia was more frequent in MS than in non-MS subjects (29vs7.6%,p-value<0.0001 for 6/7 mg/dL; 51.6vs28.0%,p-value<0.0001 for 5.6 mg/dL). Linear regression models showed that SUA is related to MS (β=1.597,p-value<0.0001). At logistic analysis Hyperuricemia was strongly related to MS when defined by the HURRAH's cut-off (OR=0.303,p-value<0.0001). The same relation is weak, although significan, when Hyperuricemia was defined by the classic cut-off (OR=0.182,p-value<0.0001).

Conclusions: Hyperuricemia is related with MS diagnosis especially when defined by the recently defined cut-off of 5.6 mg/dL

EP539 / #1199, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-16 OTHER*, POSTER VIEWING SESSION.
ATRIAL FIBRILLATION INCIDENCE IN SARS-COV-2 INFECTED PATIENTS: PREDICTORS AND RELATIONSHIP WITH IN-HOSPITAL MORTALITY

A. Maloberti [1], C. Giannattasio [1], P. Rebora [2], G. Occhino [1], N. Ughi [1], J. Rizzo [1], S. Fabbri [1], F. Leidi [1], I. Cartella [1], M. Algeri [1], S. Scarpellini [1], C. Rossetti [1], O.M. Epis [1], G. Molon [1], P. Bonfanti [1], M.G. Valsecchi [2], S. Genovesi [3]. [1]*Cardiologia 4, ospedale niguarda, milano, Italy;* [2]*Statistica, University of Milano-Bicocca, Monza, Italy;* [3]*Neprologhy, University of Milano-Bicocca, Monza, Italy*

Background and Aims : Among the different CardioVascular (CV) manifestation of the CoronaVIrus-related Disease (COVID) particular attention has been paid to Atrial fibrillation (AF). The aim of our study was to assess the incidence of AF episodes in patients hospitalized for COVID and to evaluate its predictors and its relationship with in-hospital all-cause mortality.

Methods: We enrolled 3435 cases of SARS-CoV2 infection admitted in four hospitals in Northern Italy. We collected data on clinical history, vital signs, Intensive Care Unit (ICU) admission, laboratory tests and pharmacological treatment. AF incident and all-cause in-hospital mortality were considered as outcomes.

Results: 145 (4.2%) patients develop AF during hospitalization, with a median time of 3 days (IQR:0,11.5) from admission. Incident AF patients were older and had lower eGFR, lower platelet and lymphocytes count and higher C-Reactive Protein (CRP), were admitted more frequently to ICU and more frequently died compared to subjects that didn't present AF. At the Cox regression model significant determinants of incident AF were older age (HR 1.070; 95% CI: 1.048-1.092), history of AF (HR 2.800; 95% CI:1.465-5.351), ischemic heart disease (HR 0.324; 95% CI: 0.130-0.811) and ICU admission (HR 8.030; 95% CI:4.511, 14.292). Incident AF was a predictor of all-cause mortality (HR 1.679; 95% CI:1.170-2.410), together with age (HR 1.053; 95% CI: 1.042-1.065), dementia (HR 1.553; 95% CI:1.151-2.095), platelet count (HR 0.997; 95% CI:0.996-0.999) higher CRP (HR 1.004; 95% CI:1.003-1.005) and eGFR (HR: 0.991; 95% CI:0.986-0.996)

Conclusions: AF present as the main arrhythmia in COVID-19 patients and its development during the hospitalization strongly relates with in-hospital mortality.

EP540 / #1200, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-16 OTHER*, POSTER VIEWING SESSION.
PRESCRIPTIVE APPROPRIATENESS IN PRIMARY CARDIOVASCULAR PREVENTION: DATA FROM NIGUARDA HOSPITAL

A. Maloberti, D. Ceruti, E. Gualini, V. Colombo, V. Giani, M. Milani, J. Sun, M. Alloni, C. Giannattasio. *Cardiologia 4, ospedale niguarda, milano, Italy*

Background and Aims : The main cause of waste of health resources is represented by overuse of diagnostic and therapeutic procedures. Given its high prevalence and the importance of identifying hypertensive-mediated organ damage, management of patients with arterial hypertension can lead to a lack of appropriateness. The aim of this study was to evaluate the prescriptive appropriateness of non-invasive diagnostic tests (Echocardiography, Carotid ultrasound, ECG exercise testing, 24h Ambulatory blood pressure monitoring) in outpatients referring to an ambulatory of primary cardiovascular prevention.

Methods: 559 specialistic ambulatory visits were retrospectively analysed and appropriateness of every prescription was evaluated. An integration of different Italian and European guidelines was used to define appropriateness. Moreover, we evaluated the correlation between prescriptions, appropriateness and clinical characteristics of the population.

Results: During the 559 ambulatory visits analysed, 449 prescriptions were made, including 198 echocardiographies, 148 carotid ultrasound, 85 24h ABPM and 18 ECG exercise testing. The global percentage of appropriate prescriptions was 40.3%. Focusing on each test, appropriateness rate was 49.4% in 24h ABPM, 43.9% in echocardiography, 38.9% in ECG exercise testing and 30.4% in carotid ultrasound. A significant correlation was identified between the age and cardiovascular risk category of patients and the appropriateness of echocardiography, 24h ABPM and carotid ultrasound, and a correlation between appropriateness of echocardiography and the duration of hypertension and the presence of valvular heart disease.

Conclusions: Our study shows a relevant percentage of inappropriate prescriptions of non-invasive cardiologic exams; moreover, there might be a greater lack of appropriateness in young and low risk patients.

EP541 / #1004, TOPIC: *ASA03 - DYSLIPIDEMIA AND RISK FACTORS / ASA03-16 OTHER*, POSTER VIEWING SESSION.
THE LIPID PROFILE OF POST-CORONARY SYNDROME PATIENTS AND THEIR RESIDUAL CARDIOVASCULAR RISK

F.Z. Mebarek, D. Nibouche. *Cardiology, Hussein Dey university hospital, algiers, Algeria*

Background and Aims : - Dyslipidemia is a major cardiovascular(CV) risk factor, in North Africa, little information is available on the lipidic status of the population, especially of patients with myocardial infarction. - In this study, we evaluated the lipid profile of patients after admission for ACS and their residual risk for CV disease following statin treatment.

Methods: - This study was realized at the cardiology department of the Hussein Dey hospital, from September 2020 to January 2021, 146 patients hospitalized for ACS, lipid-lowering treatment(LLT)naïve were included, fasting lipid assessment was performed after admission, mostly after 72 hours, and 08 weeks later. All patients received « Atorvastatin 80mg » as LLT.

Results: - Population mean age was 59±10 years, 80.8%were male, the initial mean level of Total cholesterol(TC) was 1.76g/l, LDLc 1,12g/l, HDLc 0,32g/l, Triglyceride 1,58 g/l, and Non-HDLc 1,44g/l. - Dyslipidemia was found in 58.9% of patients.,28,1%had hypercholesterolemia,49,3% hyper-triglyceridemia,5,5% high LDLc,82,2% a low HDLc. - After high-intensity statin treatment for secondary prevention, lipidic results showed a remaining high triglyceride level in 25,3% of patients , low HDLc levels in 81,5% ,49,3% of patients had an LDLc levels > 0,55g/l and Non-HDLc levels > 0,85g/l in 40,4% .