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Background and aim of the study Occlusive peripheral artery disease (OPAD) is a strong marker of cardiovascular events. Screening for PAD is recommended by all guidelines; however, there is no consensus on the benefit for detecting the non-occlusive stage of PAD (NOPAD). Therefore, when screening for OPAD, all patients with NOPAD are usually merged with those having normal arteries. WE aimed to assess the bio-clinical profile and morbidity related to diabetes complications in patients with NOPAD and to compare them to those with OPAD and with normal arteries at ultrasonography (UNA).
Method and material In a cross-sectional, observational, prospective study with a sub-group analysis, we recruited 327 consecutive newly diagnosed type 2 diabetics, aged from 40 to 70 year from January 2009 to December 2014. We collected clinical, biological data and screened exhaustively for macro and microvascular complications. All patients had an Ankle-Brachial Index measurement and a duplex ultrasonography (DUS). The diagnosis of PAD was done on DUS. We considered as NOPAD the presence of atherosclerosis plaque and/or medial artery calcifications without stenosis. We selected the sub-group of hypertensive diabetics for analysis. Coronary risk was calculated by using the Framingham score.
Results Among 327 newly diagnosed type 2 diabetics, 202 had hypertension, 129 women and 73 men; 12 patients had OPAD (5.9%), 111 had NOPAD (54.9%) and 79 had UNA (39.2%), aged respectively 54.8 ± 8.3, 57.1 ± 7.8 and 50.4 ± 7.9 years ($P < 10^{-6}$). Arterial DUS showed both atherosclerosis and medial arterial calcifications in 90% in the PAD groups. We didn't find significant difference between the three groups on smoking ($P = 0.824$), body mass index ($P = 0.962$), arterial blood pressure ($P = 0.058$), glycemic status ($P = 0.975$) and prevalence of metabolic syndrome ($P = 0.431$). OPAD and NOPAD patients had higher LDL ($P = 0.005$), higher coronary disease risk ($P = 10^{-4}$), lower glomerular filtration rate ($P = 0.011$) and significantly more chronic kidney disease ($P = 0.0009$), coronary artery disease ($P = 0.008$), atherothrombotic events ($P = 10^{-4}$), peripheral diabetic neuropathy ($P = 0.024$) and cognitive impairment ($P = 0.006$) than those with UNA. No significant difference has been found while comparing the OPAD and NOPAD groups on all studied parameters except for cardiovascular events that are more prevalent in the OPAD group ($P = 0.009$).
Conclusion Non-occlusive as well as occlusive PAD, is associated with a high cardiovascular morbidity when associated with type 2 diabetes and hypertension. A screening of NOPAD could help to risk stratification in hypertensive diabetics allowing them to benefit of an earlier preventive action on cardiovascular events.
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Mediacalcosis in hemodialysis, predictors and prognosis

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Introduction Mediacalcosis is common in dialysis patients, due to vascular calcifications whose pathophysiology remains complex and multifactorial; calcifications are responsible for serious life-threatening cardiovascular morbidities. The purpose of our work was to identify the predisposing factors and discuss the evolutionary aspects of mediacalcose.
Methods and patients We performed a retrospective, transversal and descriptive study. Collecting the files of 44 hemodialysis patients, who have been provided with standard sheets, including clinical information (co-morbidities, coronary events, heart failure, arrhythmias, arterial diseases, stroke..), biological (CRP, lipids, inorganic phosphate, calcium and phosphates balance ($Ca \times PO4$), Vitamin D3, PTH) and complementary investigations (TT, ECG, echocardiography, Doppler, CT),during a 4-year follow-up period, going from June 2014 to July 2018.
Results and discussion Our patients had an average age of 51.2 years old, the sex ratio (M/F) was 2.8, the average duration of dialysis was 17.4 years, diabetes was observed in 12.3% of patients, hypertension in 81.7%, dyslipidemia in 43.5%, tobacco and opiates in 15.6%, hyperparathyroidism in 71.2%, hyper phosphorus levels in 90.6%, hypercalcemia in 65.3%, and elevated CRP in 84.1%. The occurrence of major cardiovascular events included 9.3% hemorrhagic stroke, 6.2% MI, 12.3% AC/FA and 9.3% peripheral ischemic arterial disease responsible for leg amputation in 3.1% of patients; 9.3% of our patients died during the study.
Extra-renal calcifications, especially cardiovascular calcifications, are frequent in dialysis patients, at the origin of serious complications: myocardial infarction, arrhythmias, calcified valves disorders, strokes, peripheral ischemic arteriopathy, sources of morbidity and mortality in more than 50% of cases.
Many studies carried out so far, have confirmed the preponderant role of factors influencing the occurrence of vascular calcifications, increasing the risk of cardiovascular events in hemodialysis: inflammation, comorbidities, eating habits and lifestyle. In our study, these factors were found with variable incidence, but it is quite clear that their entanglement was at the origin of a high rate of morbidity and mortality among our hemodialysis population.
Conclusion Mediacalcosis is a severe complication since it increases the risk of cardiovascular morbidity and mortality in hemodialysis patients, to this end, the individualization of entangled factors involved in its pathophysiology, will slow down or prevent its progression in the future.
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Hypertension: Do not forget the occupational etiology

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Background and aims :The etiological diagnosis of arterial hypertension remains rare. The purpose of the study was to analyse the occupational hypertension characteristics in workers exposed to lead excluding other causes of hypertension.
Results We included 13 workers of average age of 37 years (with extremes of 28 to 48 years). They were welders (6 cases), mechanics (3 cases), workers in electrical cable manufacturing industries (2 cases) and workers in dental amalgam plants (2 cases). The average duration of work and exposure was 8 hours/day for an average period of 5 to 7 years. The signs leading to consultation were various: urinary, digestive, neurosensory or general signs.
The physical examination confirmed the presence of hypertension in both arms in standing and supine position. The complementary examinations were normal. The search for toxics was performed.