story of chronic arterial hypertension and dyslipidemia, was admitted with sudden-onset epigastralgia, dyspnea, and chest pain. Clinical assessment revealed a regular heart rate and rhythm, alongside a distinct "tumor plop" sound during early diastole. Elevated blood pressure and reduced oxygen saturation were noted, with electrocardiography reflecting sinus rhythm, elevated ST segments in anterior leads, and elevated cardiac biomarkers. Bedside echocardiography unveiled akinesia in the left ventricular apex, contributing to a decreased ejection fraction and a hyperechoic mass originating from the left atrium. Although ACS was initially suspected due to the clinical presentation and electrocardiographic changes, transthoracic echocardiography revealed that the underlying cause was AM, which had led to thromboembolic events affecting the coronary arteries. The management strategy involved ticagrelor administration, aspirin therapy, and nitroglycerin, resulting in partial alleviation of symptoms. Coronary angiography exposed thrombotic occlusion within the anterior descending artery, necessitating successful mechanical thrombus aspiration. Subsequent transesophageal echocardiography confirmed the presence of a voluminous hyperechoic mass within the left atrium. Surgical excision was performed, and histological analysis confirmed the tumor's AM nature. This case highlights the complexity of AM's clinical presentations, which often lack specificity, and emphasizes embolization as a frequent complication. Moreover, the case underscores the rare occurrence of ACS induced by AM-related embolism. The case's unique aspects shed light on the potential for thrombosis when AM surfaces are irregular and the facilitation of embolic events through the mitral valve. The convergence of AM with ACS, though rare, added an intriguing layer of complexity. While ACS was a contributing factor to the patient's presentation, the thromboembolic events stemming from the AM were the fundamental drivers of her clinical scenario. This case highlights the necessity of meticulous clinical assessment and investigative scrutiny, particularly when symptoms and findings appear atypical for the assumed diagnosis. It also emphasizes the importance of considering a broad range of differential diagnoses, including those that might be initially dismissed due to their rarity.

A857: CAN 24 HRS ECG MONITORING STILL BE USEFUL FOR DIAGNOSIS OF CORONARY ARTERY SPASM?

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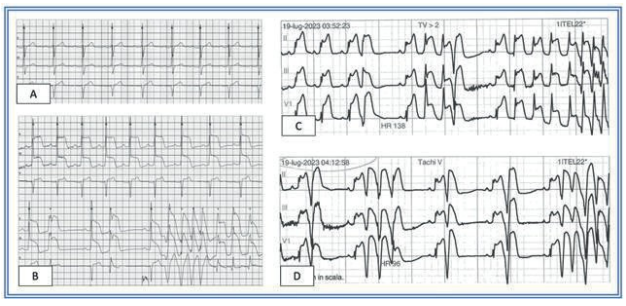
This case presented a 45 years old male patient with history of sporadic episodes of chest pain at rest and palpitations. In his medical history: arterial hypertension, dyslipidemia, former smoker. The patient underwent ambulatory ECG (panel A), echocardiogram (both normals) and 24-hours ECG Holter monitoring, that showed episodes of relevant transient ST elevation followed by nonsustained ventricular tachycardia (NSVT) (B). The patient was hospitalized and underwent coronary angiography with evidence of high takeoff of right coronary artery with mild atherosclerotic disease and moderate stenosis of left anterior descending coronary artery, functionally not significant (iFR: LAD=0.94, RCA=0.93). The night after coronary angiography the patient had chest pain lasting 10 minutes and regressed spontaneously, with evidence of ST elevation followed by NSVT at ECG monitoring(C, D). In absence of significant atherosclerotic coronary disease and considering the medical history of the patient, diagnosis of coronary artery spasm (CAS) was suspected. Therefore, therapy with diltiazem and nitrates was started. The patient remained always asymptomatic and underwent exercise stress echocardiogram after initiation of therapy, resulted negative for inducible ischemia. This case highlights the usefulness of Holter ECG monitoring for the diagnosis of CAS, that often results challenging, due to transience of coronary spasms. Holter ECG monitoring could appears as an obsolete examination, conversely it is a low-cost and non-invasive examination that can give valuable information in selected patients. The indication for implantable cardioverter defibrillator (ICD) implantation and its role in primary prevention in patients with CAS still not clearly established. However, ICD implantation should be considered in high-risk patients despite optimal medical treatment.



A858: EVALUATION OF THE STRESSFUL EVENT IN PATIENTS PRESENTING WITH TAKOTSUBO SYNDROME: HOW MUCH STRESS IS NEEDED?

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Introduction. The association between Takotsubo syndrome (TTS) and exposure to physical or emotional stress is of common knowledge. The patient usually presents with angina-like chest pain and/or dyspnea and a typical ECG pattern with diffuse T-wave inversion, sometimes preceded by ST-segment elevation. Generally, Nt-proBNP increases disproportionally compared to troponin, which is only mildly elevated. In its most typical variant, echocardiography shows apical ballooning and hyperkinetic basal segments. The diagnosis is confirmed by exclusion of coronary artery obstruction and/or dissection at angiography. Higher mortality is expected in patients with severe mitral regurgitation (MR) due to left ventricular (LV) dilatation and systolic dysfunction which can occur in the first hours after the acute event. Another critical complication is represented by ventricular tachyarrhythmias associated with Q-T interval prolongation observed in the typical ECG pattern. The aim of this evaluation is to identify the stressful event associated with TTS in patients admitted to our hospital.
Methods. We analyzed a population of 11 patients admitted to the Cardiology Unit of Ospedale di Circolo in Varese (mean age: 73 yrs; mean hospitalization: 12.2 days) with diagnosis of TTS, between 01/01/2023 and 31/08/2023. The diagnosis was confirmed by the typical ECG pattern, echocardiography, troponin alterations and coronary angiography.
Results. In the majority (9 out of 11) of our patients there is a predominance of emotional stress, and only 2 of them were diagnosed with TTS after a physical stress: 1 after a long walk into the woods, 1 as a consequence of evacuation after constipation lasting 1 week. In 9 patients an emotional stress was identified as follows: in 3 symptoms occurred when already hospitalized (2 for pacemaker implantation – 1 of them was a psychiatric patient – and 1 for colon-rectal surgery); 4 patients developed symptoms as a consequence of an argument (1 with her husband, 2 with a friend – 1 simply during a card game – and 1 at the workplace); 1 patient manifested the syndrome after a nightmare and the last one after an unexpected birthday party. Moreover, based on a general consensus, the stress event could be considered mild in 8/11 patients (72%). Finally, in 3/11 patients there was a severe functional impairment: in 2 MR with systolic anterior movement and in 1 reduction of ejection fraction to 30% with severe multi-jet MR was observed. Interestingly, in 2 of these 3 cases the TTS was caused by only a mild emotional stress. All patients were discharged asymptomatic with significant improvement of LV function.
Conclusions. Based on these data, as even mild emotional stress can cause the syndrome, we hypothesize the role of individual pre-existing psychological factors in the symptoms break out. This seems important considering the possibility of TTS recurrence. The severity of the LV impairment with MR apparently is not associated with the severity of the stressful event.

A859: CORONARY AND CARDIAC SCREENING IN LIVER TRANSPLANTATION CANDIDATES: A LONG JOURNEY WITH FREQUENT IDENTIFICATION OF MODERATE AND SEVERE CORONARY ARTERY DISEASE

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Background. In patients (pts) with Liver cirrhosis (LC) CV risk stratification before major liver surgery (Liver Transplantation and Liver resection) is a complex task due to the unique cardiovascular physiology of this subset of pts, and is aimed to detect coronary artery disease (CAD) and nonCAD cardiac abnormalities. NASH is a faster-growing indication for liver transplantation and is an independent risk factor for presence of obstructive CAD. LC pts often show anemia and platelets (PP) reduction, that may impact on risk related to invasive vascular procedures, such as PCI/CABG.
Aims. To describe in LC pts: 1) temporal shifts (2013-2023) in etiological LC burden; 2) features of non-ST parameters at exercise stress test reflecting functional capacity; 3) tools/tests used and duration required for assessment of CV risk; 4) incidence of anemia, low PP count (<100 10^9/L) and CAD.
Methods. Ambispectic Single-Centre Study collecting data on exercise EKG parameters (MET at peak, maximal heart rate incompetence [MHR-I], heart rate recovery at 1 min [HRR1']) in 194 LC pts (age 59.8±10.3), 125 CONTR (58.2±15.6) and 18 CHF (72.1±11.2). Within LC pts, multiple noninvasive (exercise stress testing, myocardial perfusion

imaging [MPI], pharmacological Stress echocardiography [Echo-stress]) and invasive modality of imaging and of stress testing were used. Coronary computed tomography angiography (CT) to derive Ca-score and coronary stenosis and invasive coronary angiography (ICA) were used to quantify CAD presence and critical CAD.
Results Metabolic cause (NASH) of LC moved overtime from 2.7% to 21.9% while viral (HBV/HCV) and EtOH causes moved from 12%/39% and 23% to 6%/16% and 38%. Exercise Stress test parameters collected within study groups (CONTR, LC, CHF) are: MET peak: 7.1±1.8, 5.0±1.6, 4.5±1.2; MHR-I: 0.76±0.15, 0.57±0.23, 0.65±0.21; HRR1': 21.1±8.7, 13.7±7.5, 10.9±7.9 (p<0.01 CONTR vs other groups). Time required (days) for cardiac consult to rule in/out access to liver surgery is 3±6 days for those undergoing visit+Echo only; with additional testing: 51±54 +CT/ICA, 61±60 + Echo-stress, 63±61 + MPI and 89±69 +PCI. Within LC pts undergoing coronary imaging: Hb levels (g/L) and PP count (10^9/L) are (IQ 25-50-75) 111-125-138 and 68-104-162; Ca-score at CT is 0-99 (19.5%), 100-399 (11%),>400 (69.5%); CAD identified is subcritical 39.1%, intermediate 21.8%, critical 31.1%, PCI and stenting are done for 1V/2V disease (76.9%/23.1%) and in proximal/non proximal segments 46%/56%, with no complications in pts with low PP count.
Conclusions. An increase of metabolic burden has been observed overtime in the LC pts; functional capacity is reduced in LC pts, and the blunted chronotropy and reduced cardiorespiratory fitness, similar between LC and CHF pts, result in low sensitivity and suboptimal negative predictive value for the detection of coronary artery disease; significant CAD is better searched with noninvasive or invasive coronary angiography. Collecting cardiac information may be a time-consuming task, requires 3-89 days and includes search for presence of CAD in 50% LC pts. In CAD pts, PCI is done at proximal segments in 46% LC pts, and the frequent finding of count of PP<100 10^9/L was not associated to excess in bleeding risk.

A860: ION AND DIONYSUS: NEVER DISTRACTED ABOUT DIFFERENTIAL DIAGNOSIS.

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Background. In normal individuals, cellular and urinary responses prevent significant potassium accumulation in the extracellular fluids. This phenomenon, called "potassium adaptation", could be compromised in the case of acute renal injury with the risk of a dangerous Potassium overload in the extracellular Fluid. Acute variation of this ion concentration could alter the Myocardial conduction system by changing cardiomyocyte membrane potential and the work of voltage-dependent ion channels, producing characteristic EKG changes that could simulate other pathological scenarios delaying a prompt diagnosis. EKG modifications strictly depend on the level of potassium in the blood (high voltage and pointed T waves, QRS enlargement, Atrioventricular block, disappearance of P wave, ST elevation, fusion of QRS with T waves, ventricular fibrillation and asystole. The most common extra-cardiac causes of the rise of troponin with ST-segment elevation are acute neurologic injuries like stroke or subarachnoid haemorrhages, sepsis, acute renal failure and pulmonary embolism.
Case presentation. We presented the case of a 60-year-old patient, who manifested Syncope preceded by asthenia and vomiting, transferred to our cath lab for a suspected SCA-STEMI Diagnosis. On-site ECG showed spread ST elevation in all peripheral and precordial leads. The patient arrived with altered sensorium and consciousness (GCS =7), hypoxic and hypercapnic respiratory failure. The initial diagnosis was SCA-STEMI, so we performed coronary angiography as the first exam, excluding any coronary obstruction and secondary CT thorax and Brain scan to exclude pulmonary embolism and cerebral haemorrage. Arterial blood gas analysis showed severe metabolic acidosis with high levels of potassium 9 mEq/L and lactate (13 mmol/L). Based on clinical status and the Blood exam results, an Acute kidney injury diagnosis was formulated (supported by the presence of Diabetes, dehydration and concomitant assumption of metformin). The patient was transferred to the intensive care unit to perform invasive mechanical ventilation and hemodialysis, with total recovery in a few hours, EKG alterations reversion and Blood values normalization in a few hours.
Conclusions. A Prompt differential diagnosis of ECG modification and recognition of ionic alteration allows early management with the right therapy and reversion of clinical state. Sometimes, ST elevation differential diagnosis could be challenging and not immediate. It is fundamental to not delay the diagnosis based on the clinical history and latter-day symptoms and to avoid performing all diagnostic exams to exclude the most severe pathologies potentially linked to the ECG abnormalities. AI-implemented technologies like Machine learning applied to ECG interpretation can significantly help in the most accurate differential diagnosis of ECG abnormalities to direct fast diagnostic algorithms to the right pathology and to provide a prompt therapeutic intervention.

A861: LOEFFLER'S ENDOCARDITIS WITH BIVENTRICULAR APICAL THROMBI DUE TO STRONGYLOIDES STERCORALIS INFECTION: A CASE REPORT

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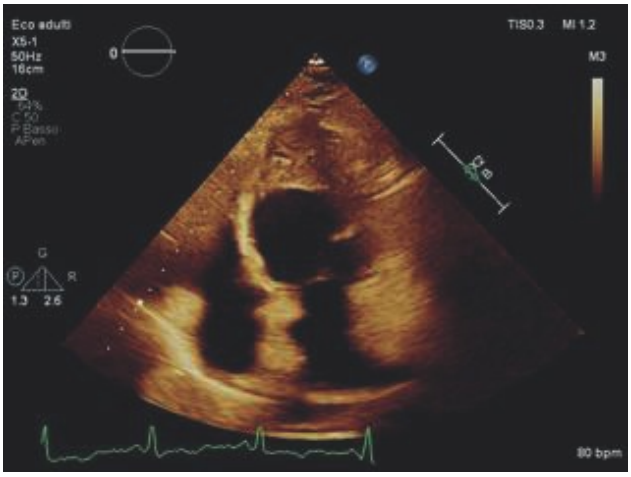
Introduction. Loeffler's Endocarditis (LE) is a rare condition caused by eosinophilic proliferation and characterized by endomyocardial thickening and intracardiac thrombi formation that may lead to restrictive cardiomyopathy. We report a case of LE with biventricular apical thrombi due to Strongyloides stercoralis infection.
Case presentation. A 78-year-old woman was admitted to our Cardiac Intensive Care Unit for acute pulmonary oedema. In her past medical history she reported hypertension, active smoking and mild hypercholesterolemia. Electrocardiography revealed sinus rhythm with deep negative T waves and ST segment depression in V4-V6, aVF and DII-DIII. Laboratory findings showed elevated white blood cells count with elevated eosinophil count (0,87 x 10^3/mL), mildly elevated C-reactive Protein levels, elevated brain natriuretic peptide (1605 pg/ml, normal values 0-60 pg/mL) and cardiac troponin I of 206 ng/L (normal values: 0-37 ng/l). The echocardiogram revealed an hyper-echogenic, homogeneous and hyperkinetic cardiac mass obliterating the apex of left ventricle (LV), preserved ejection fraction and signs of elevated filling pressure of LV. The patient was initially treated with oxygen and diuretics with good clinical and hemodynamic response. Coronary angiography showed mild widespread atheromasia without any critical stenosis. In order to better characterized the ventricular mass, a cardiac magnetic resonance was performed, revealing the presence of thrombi in the apex of both ventricles (24x23 mm on longitudinal plane, 34 mm on axial plane in LV), hyper-enhancement with transmural involvement of the apex of LV and a subendocardial and mesocardial involvement in the lateral and posterior wall of LV in late gadolinium enhancement images. Anticoagulant therapy was started, initially with Low-Molecular Weight-Heparin and then with Warfarin. Bone marrow biopsy was negative for lympho-myeloproliferative disease. Parasitological investigations showed the presence of positive serology for Strongyloides stercoralis with negative coprocolture and elevated eosinophil cationic protein levels. Given this findings, diagnosis of LE due to S. stercoralis infections was made and therapy with ivermectin and prednisone were started. At 4 months follow up the patient was in good clinical conditions, with a clear reduction of left apical thrombus dimensions and a normalization of eosinophilic count.
Conclusions. Cardiac masses are often a diagnostic challenge. Since several conditions can lead to eosinophilic proliferation responsible of the cardiac damage, a multidisciplinary approach is crucial to reach the correct diagnosis and therefore establish an appropriate therapy that can lead to complete resolution of the cardiac involvement. Non-invasive imaging modalities plays a central role allowing early detection and accurate staging of LE.



A862: EXCLUSIVE CHRONIC HEAT-NOT-BURN CIGARETTE SMOKING ALTERS THE PROFILE OF CIRCULATING MICRORNAS

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