

Abstract # 109**Metabolic syndrome in hospitalized geriatric patients**

Patricia Mateo Martín¹, Nuria Cristina Herrera Fernández², Javier Alonso Ramírez², Orti Barrasa Bermejo¹, Francisco Javier Balea Fernández¹, Dácil Cabezas Jaén², Rolf Christian Sander Zúñiga², Ruth Paz Maya²

¹Training in physician of geriatrician at Lanzarote Insular Hospital, ²Geriatrician physician at Lanzarote Insular Hospital.

Introduction: metabolic syndrome (MetS) increases with age. This assumes a public health problem by encompassing factors that promote greater cardiovascular morbidity and mortality. We aimed to establish the prevalence and variables related to MetS in pa

Abstract # 110**Frailty and calcium homeostasis in elderly patients with severe aortic stenosis**

Pablo Enrique Solla Suárez¹, Javier Montero Muñoz², Marta Fernández Fernández², Jorge Eduardo Herrera Parra², Eva María López Álvarez², José Gutiérrez Rodríguez¹

¹Área de Gestión Clínica de Geriátria Hospital Monte Naranco, Oviedo, Asturias, Spain. Instituto de Investigación Sanitaria del Principado de Asturias, Oviedo, Asturias, Spain, ²Área de Gestión Clínica de Geriátria Hospital Monte Naranco, Oviedo, Asturias, Spain

Introduction: Severe aortic stenosis (SAS) is the most common valve disease in the elderly. SAS pathophysiology is not well understood. Recent studies have suggested a possible association between AS and calcium balance. Objectives: Frailty detection and description of calcium metabolism in patients over 75 years of age with AS included in a Geriatric Assessment Program.

Methods: Prospective study, including patients over 75 years of age with SAS referred from cardiology to a specialized geriatric consult. Variables: -Baseline characteristics: age, sex, functionality (Lawton and Barthel indices), nutritional status [Mini Nutritional Assessment Short-Form, (MNA-SF)], cognitive function [Mini Mental State Examination (MMSE)]. -Frailty: Short Physical Performance Battery (SPPB). -Biological parameters: GFR-CKD-EPI (mL/min/1.73m²). Serum Albumin (g/L), calcium (mmol/L), phosphorus (mmol/L), 25-OH-vitaminD (ng/mL), iPTH (pg/ml), corrected Calcium for serum albumin (mmol/L).

Results: n=50, age 83.66 ± 3.86, female: 54.0%. Lawton Male: 4.48 ± 0.84 and Female: 6.67 ± 1.79 (independent: 56.0%), Barthel 94.80 ± 7.42 (independent: 76.0%), MNA-SF 12.52 ± 1.50 (normal: 80.0%), MMSE 27.84 ± 2.30 (cognitive impairment: 6%). SPPB: 8.64 ± 1.74, frail (0–6): 18.0%. GFR-CKD-EPI 6.95 ± 17.26 (< 60 mL/min/1.73m²:58%). Albumin 44.36 ± 2.52 (hypoalbuminemia:0%), calcium 2.37 ± 0.10 (< 2.20 mmol/L:4.0%; >2.55 mmol/L:6.0%), phosphorus 1.02 ± 0.18 (< 0.87 mmol/L:25.0%; > 1.45 mmol/L:2.1%), 25-OH-vitaminD 12.36 ± 5.18 (< 10 ng/mL:40.0%; < 20 ng/mL:92%), iPTH 76.82 ± 42.61 (> 65 pg/ml:40%), corrected Calcium for serum albumin 2.26±0.85 (< 2.20 mmol/L:18.0%; > 2.55 mmol/L:0.0%).

Key conclusions: Elderly patients with SAS included in our study were mostly in good functional, cognitive and nutritional status; and 18% were frail. Alterations in calcium metabolism were frequently detected: hypocalcemia (18%), hypophosphatemia (25%) and high levels of iPTH (40%). Vitamin D deficiency was present in most patients (92%), being severe in almost half of the cases.

Abstract # 111**Number and replating capacity of endothelial colony forming cells are telomere length dependent: implication for human atherogenesis**

Simon Toupance¹, Stéphanie Simoncini², Carlos Labat¹, Chloé Dumoulin², Tsung-Po Lai³, Oualid Ayad¹, Cécile Lakomy¹, Véronique Regnault¹, Patrick Lacolley¹, Françoise Dignat-George², Florence Sabatier², Abraham Aviv³, Athanase Benetos⁴

¹Université de Lorraine, Inserm, DCAC, F-54000 Nancy, France, ²Aix Marseille University, Inserm, INRA, C2VN, F-13005 Marseille, France, ³Center of Human Development and Aging, Rutgers, The State University of New Jersey, New Jersey Medical School, Newark, NJ 07103, USA, ⁴Université de Lorraine, CHRU-Nancy, Pôle “Maladies du Vieillissement, Gérontologie et Soins Palliatifs”, F-54000, Nancy, France

Introduction: Short leukocyte telomere length (TL) is associated with atherosclerotic cardiovascular disease (ASCVD). Given that TL is equivalent across somatic cells within the individual, patients with ASCVD might have short telomeres in circulating cells other than leukocytes. These include endothelial colony forming cells (ECFCs), which behave as progenitor cells displaying endothelial repair activity. To explore a potential role of short TL in atherogenesis, we examined associations of TL with proliferative dynamics of ECFCs.

Methods: To isolate ECFCs, we performed a clonogenic assay on blood samples donated by 116 participants (aged 24–94) in the TELARTA study. We detected no ECFC in 29 blood samples (Group 1) but detected clones with no replating capacity in other 29 samples (Group 2). In additional 58 samples, we isolated clones with replating capacity (Group 3). TL was measured by Southern blotting in leukocytes (LTL) and ECFCs (ECFC-TL).

Results: Age- and sex-adjusted LTL was the shortest in Group 1 (6.51 ± 0.13 kb), longer in Group 2 (6.69 ± 0.13 kb) and the longest in Group 3 (6.78 ± 0.09 kb; p < 0.05). In group 3, ECFC-TL was associated with the number of generated clones (p < 0.01). ECFC-TL was strongly correlated with LTL (r = 0.82; p < 0.0001) but was always longer (7.98 ± 0.13 kb vs. 6.74 ± 0.12 kb; p < 0.0001).

Conclusions: Blood samples with a longer LTL yield a higher number of self-renewing ECFCs. These results suggest that individuals with a longer LTL might have a better endothelial repair capacity.

Abstract # 112**Characterization and prognosis of very elderly patients, with anemia, cardio-cerebrovascular disease and iron deficiency in 4 Portuguese centres, in 2017**

Margarida Madeira¹, Eugeniu Gisca², Daniela Brigas¹, Ana Rita Rego³, Ana Vigário³, Arsénio Barbosa⁴, Sílvia Pereira², Marta Soares⁴, Ricardo Racha-Pacheco⁵, Ana Macedo⁵

¹CHS-HSB, Portugal, ²GO, Portugal, ³CHP-HSA, Portugal, ⁴CHSJ, Portugal, ⁵Keypoint, Portugal

Introduction: Vascular diseases are the main death cause in Portugal, associated with cardio and cerebrovascular diseases (CVD). Anemia and iron deficiency (ID) are vascular risk factors common in the elderly, associated with worse clinical outcomes. Given the lack of national data concerning on this matter, our study aimed at characterizing and evaluating prognosis of very elderly patients (VEP), with anemia and CVD, with and without ID.

Methods: Data was obtained through local data of the participating centres of patients admitted to Internal Medicine wards in 2017 and