**Trad RC Medicina 122** (Resúmenes)

**a01\_2008** *(Carta al editor. No lleva resumen)*

**Ageing and Metabolic Syndrome: Role of Endothelial Senescence in Physiotherapy**

Síndrome metabólico y envejecimiento: papel de la senescencia endotelial en la fisiopatología

**a02\_2533 (Carta al editor. No lleva resumen)**

**Urgent Start Peritoneal Dialysis in Patients with COVID-19 in a High-Rise City**

Diálisis peritoneal de inicio urgente en pacientes con COVID-19 en una ciudad de gran altura

**a03\_2351**

**Impact of Musicalized Physical Activity Program on the Physical Fitness of Elderly Women**

Impacto de un programa de actividad física musicalizada sobre la aptitud física de ancianas

**ABSTRACT**

**Introduction**: Aging is a natural process resulting from multiple molecular and cellular factors producing deterioration of physical fitness.

**Objective**: To determine the impact of a musicalized physical activity program on the physical fitness of elderly Colombian women.

**Methods**: A quasi-experimental study carried out in 49 elderly women from Bucaramanga, Colombia. We implemented a 10-week musicalized physical activity program. Body composition, aerobic capacity, and lower limb strength were determined by Body Mass Index, six-minute walk, and chair sitting and standing tests, respectively. The variables were analyzed in measures of central tendency or frequencies according to their nature. To determine the existence of a statistically significant difference, the t-student and Fischer's exact tests were used. The level of significance was p ≤ 0.05.

**Results**: After implementing the program, the mean BMI decreased by 0.71 kg/m2, the mean number of repetitions increased by 2.14 in the strength resistance test and the average reached meters increased by 39 .89 in the aerobic capacity test. Likewise, the number of women who moved into the “functional” category in strength and aerobic capacity levels and the number of women who reached a normal weight increased. The aforementioned differences were statistically significant.

**Conclusions**: The musicalized physical activity program improved body composition and increased levels of muscle strength and aerobic capacity.

**Keywords**: physical fitness; elderly; overweight; muscular strength; health of the elderly.

**a04\_2542**

**Risk Factors Associated With Cerebrovascular Diseases in Women**

Factores de riesgo asociados a enfermedades cerebrovasculares en mujeres

**ABSTRACT**

**Introduction**: Cerebrovascular disease is the third cause of death in the world and IT represents the most frequent cause of permanent disability in adults.

**Objective**: To determine the risk factors associated with cerebrovascular diseases in women.

**Methods**: An analytical, observational, case-control study was carried out in 35 female patients diagnosed with cerebrovascular disease (cases) and another group of patients who did not show said disease (controls). The percentage was used as a summary measure of the qualitative variables. The ratio of crossed products, the confidence interval and the Chi2 test were determined, as well as the attributable risk in percentage exposed to identify the factors that were associated with the presence of the disease.

**Results**: Hypercholesterolemia, obesity, sedentary lifestyle, inadequate nutritional habits and the use of oral contraceptives were the most significant modifiable risk factors, with cross-product ratio values of 10.15, 9.08 and 8.17 and an attributable risk in exposed of 90.1%, 89%, and 87.8%, respectively. On the other hand, heart disease, arterial hypertension, and previous cerebrovascular disease were the most significant associated conditions with a ratio of cross products in exposed of 3.55 and 2.97 and an attributable risk in exposed of 71.8 and 66. .3%, respectively.

**Conclusions**: Modifiable risk factors such as hypercholesterolemia, obesity, sedentary lifestyle, inadequate nutritional habits and the use of contraceptive methods increased the probability of suffering from cerebrovascular disease in the women studied.

**Keywords**: stroke; risk factors, women.

**a05\_2546**

**Frequency of Pulmonary Hypertension In Patients With Chronic Obstructive Pulmonary Disease**

Frecuencia de hipertensión pulmonar en pacientes con enfermedad pulmonar obstructiva crónica

**ABSTRACT**

**Introduction**: Chronic obstructive pulmonary disease is one of the most frequent, worldwide. It has impact on mortality, causing significant disability and affecting a considerable number of subjects of productive age. Pulmonary hypertension is a common complication of chronic respiratory diseases, particularly chronic obstructive pulmonary disease.

**Objective**: To describe patients with chronic obstructive pulmonary disease and suspected pulmonary hypertension.

Methods: A descriptive, prospective study was carried out in 50 patients treated at Benéfico Jurídico Pneumological Hospital from November 2016 to January 2018. Variables such as age, sex, ventilatory function test, chest X-ray, electrocardiogram and the echocardiogram were analyzed.

**Results**: Out of 700 patients with chronic lung disease, pulmonary hypertension was suspected in 7% and confirmed in 34. The frequencies by sex were similar and those older than 60 years prevailed. 41.6% of the patients had severe respiratory involvement, 70.6% had mild pulmonary hypertension and 64.7% had grade 3 dyspnea. The kappa indices between the techniques used for the diagnosis of pulmonary hypertension exceeded the figure of 0 .74.

**Conclusions**: The frequency of pulmonary hypertension in patients with chronic obstructive pulmonary disease was high. Patients with severe impairment of respiratory function and mild pulmonary hypertension predominated. The degree of chronic obstructive pulmonary disease did not determine the severity of pulmonary hypertension. The highest concordance values between diagnostic techniques were obtained for radiography and echocardiography.

**Keywords**: COPD; spirometry; pulmonary hypertension; echocardiography.

**a06\_2547**

**Clinical-Epidemiological Description of Urolithiasis**

Caracterización clínico-epidemiológica de la urolitiasis

**ABSTRACT**

**Introduction**: Urolithiasis causes pain, renal functional deterioration and notorious economic expenses.

**Objectives**: To identify the clinical-epidemiological characteristics of nephrolithiasis.

**Methods**: A descriptive, cross-sectional study was conducted in a total of 2,923 people from to three clinics of Plaza de la Revolución Teaching Community Clinic, Plaza de la Revolución municipality, Havana province, Cuba. They were selected by simple random sampling from the 16 clinics that the health area has. The data was obtained through a survey and structured interview. The information was processed automatically (IBMSPSS 22.0). Frequency distribution analysis was used, prevalence rates were calculated and the homogeneity test was used.

**Results**: The prevalence of urolithiasis was 4.99 per 100 inhabitants, 6.3 among men and 5.7 among white-skinned men. The average age at diagnosis was 39.3 years. Among the risk factors for lithiasis, the high intake of oxalates prevailed (97.3%). Ultrasound was the most used form of diagnosis (67.8%). Phytotherapy was the most used medical treatment (69.2%). A medical permit was issued to 16.4% of the patients in the last two years.

**Conclusions**: The prevalence of urinary lithiasis in Plaza de la Revolución Teaching Community Clinic is high, prevailing in males, in white-skinned and middle aged subjects. High oxalate intake is the most common risk factor for urinary lithiasis found. The most used form of diagnosis is ultrasound and the most used treatment is phytotherapy.

**Keywords**: urolithiasis; epidemiology; Cuba; oxalate.

**a07\_2552**

**Effects of Replacement Therapy for Subclinical Hypothyroidism on Carotid Intima-Media Thick**

Efectos del tratamiento sustitutivo del hipotiroidismo subclínico en el grosor intima-media carotideo

**ABSTRACT**

**Introduction**: Subclinical hypothyroidism is related to cardiovascular alterations such as subclinical carotid atherosclerosis due to endothelial damage as a consequence of various factors, carotid intima-media thickness (CIMT) being a recognized marker, whose elevation is frequently mentioned in association with this thyroid dysfunction.

**Objective**: To determine the effects of replacement therapy in patients with subclinical hypothyroidism in CIMT.

**Methods**: An intervention study was carried out in 94 patients diagnosed with subclinical hypothyroidism, who did not have substitutive treatment. They were treated in Endocrinology consultation at 10 de Octubre hospital. These subjects underwent determination of TSH, total cholesterol, LDL cholesterol, cholesterol HDL, triglycerides. They got carotid ultrasound at the beginning of the study and one year after achieving euthyroid status with replacement treatment, to establish differences in the parameters evaluated before and after replacement treatment.

**Results**: Prior to treatment, hypercholesterolemia was found in 87.2% of patients and hypertriglyceridemia in 38.3%, while elevated LDL cholesterol and decreased HDL cholesterol values were found in 55.3% and 19. .3% of them, CIMT was within the normal range. After treatment with levothyroxine, all the mean values of the parameters studied were modified, except in the case of triglycerides.

**Conclusions**: Subclinical hypothyroidism replacement therapy has beneficial effects on CIMT, which could be secondary, among other factors, to the improvement of the lipid profile.

**Keywords**: subclinical hypothyroidism; carotid intima-media thickness; subclinical carotid atherosclerosis; substitutive treatment.

**a08\_2580**

**Effectiveness Of Astorvastin In Acure Atherotrombotic Cerebral Infartation**

Eficacia de la atorvastatina en el infarto cerebral aterotrombótico agudo

**ABSTRACT**

**Introduction**: Cererovascular diseases represent an important health problem worldwide and in Cuba they rank the third cause of death and the first cause of disability.

**Objective**: To evaluate the use of astorvastin in acute atherotrombotic cerebral infactation.

**Methods**: A longitudinal prospective study was carried out in patients who attended the emergency room of Julio Trigo López Surgical Clinical Hospital diagnosed with acute atherothrombotic cerebral infarction. Randomly and with prior informed consent, they were given a dose of 0, 20 mg or 40 mg of atorvastatin. Computerized axial tomography of the skull was performed, which was repeated on day 3 and day 30. The value of C-reactive protein in the emergency room was determined, and at day 30, they were clinically evaluated daily during admission and 30 days later, according to the scale of the National Institute of Health Stroke Scale in emergency room.

**Results**: The size of the infarcted area decreased by 19.4% with 40 mg of atorvastatin, as well as the value of C-reactive protein, which decreased by 16 mg/L. The clinical evaluation according to the National Institute of Health Stroke Scale showed reduction of more than 8 points according to the dose of atorvastatin used.

**Conclusions**: The efficacy of atorvastatin was demonstrated by the reduction of the infarcted area, the reduction of C-reactive protein values and the favorable clinical evolution. All of these factors were directly proportional to the dose of atorvastatin used.

**Keywords**: efficacy; atherothrombotic cerebral infarction; atorvastatin; protein C

**a09\_2593**

**Clinical Characterization of Patients with Moderate COVID-19 Admitted To Public Institutions in Panama**

Caracterización clínica de los pacientes con COVID-19 moderado ingresados en instituciones públicas de Panamá

**ABSTRACT**

**Introduction**: In Panama, temporary centers for medical care were created in some public establishments to meet the massive demand for cases with COVID-19.

**Objective**: To clinically describe hospitalized patients with moderate COVID-19. Methods: A descriptive, ambispective, case series study was conducted from February to April 2021. It included all admissions in the first 5 months of the Comprehensive Care Center for Moderate Cases due to COVID-19 in Figali. A questionnaire was designed for each patient with data collected from individual electronic medical records.

**Results**: Out of 628 admitted patients, 58.1% were men and 41.6% were in the age group ≥60 years. 54.94% were admitted after 7 days of symptoms, mainly from isolation hotels (39.65%) and hospitals (26.43%). The most frequent symptoms were cough, dyspnea, fever and weakness. 84.39% were classified as moderate COVID-19. 51.75% required admission to the Special Respiratory Care Unit, and out of these 3.82% required invasive mechanical ventilation. 67.70% were discharged and 14.59% were transferred to third level hospitals after orotracheal intubation.

**Conclusions**: Centro Figali provided medical care to patients with moderate, severe and critical COVID-19. General and upper respiratory symptoms prevailed, which intensified in the pulmonary phase of the disease and led to admission. Among men, older adults and patients with chronic non-communicable diseases were the majority of those admitted and deceased.

**Keywords**: coronavirus infections; signs and symptoms; respiratory insufficiency.

**a10\_2633**

**Ultrasonographic Characterization of Knee Joint Damage for Evaluation of Spondyloarthropathies**

Caracterización ultrasonográfica del daño articular en rodilla para evaluación de las espondiloartropatías

**ABSTRACT**

**Introduction**: Spondyloarthropathies are diseases characterized by inflammation of the axial skeleton, peripheral joints and tendon inversions. Many of the alterations in asymptomatic patients with synovitis and subclinical enthesitis have been revealed by ultrasound, an adequate technique to evaluate this condition.

**Objective**: To evaluate the ultrasound characteristics of knee joint damage in patients diagnosed with spondyloarthropathies and their relationship with clinical-analytical examination.

**Methods**: An observational, descriptive and cross-sectional study was carried out in 53 patients with spondyloarthropathies; 26 women and 27 men; 106 knees were examined.

**Results**: Patients with ankylosing spondylitis predominated; 73.6% of the patients studied. Out of the entire sample, 43.4% had inflammatory activity in the right knee and 37.7% was bilateral. 58.5% had joint effusion; 84% were transparent. 61.3% of the cases studied showed synovial thickening and 81.5% was avascular. In the vascularized membrane, the vasa recto predominated (12%). 23.6% of the sample had a popliteal cyst.

**Conclusions**: High resolution ultrasound in knee spondyloarthropathy was a useful technique to detect thickening of the synovial membrane, effusion and increased vascularization. It was also shown that there was no relationship between acute phase reactants and inflammatory activity, as well as Doppler activity in knee spondyloarthropathies in this series.

**Keywords**: spondyloarthropathy; synovial; enthesis; ultrasound; Doppler.

**a11\_2683**

**The Post-COVID-19 Syndrome in Patients with Coronavirus Disease**

El síndrome pos-COVID-19 en pacientes con enfermedad por coronavirus

**ABSTRACT**

**Introduction**: Postcovid syndrome is a new and unique phenomenon. Its symptoms, particularly extreme fatigue, can have knock-on effects on a person's quality of life.

**Objective**: To describe some clinical and epidemiological characteristics of patients with post-COVID-19 syndrome.

**Methods**: We conducted a retrospective descriptive study of 159 patients who attended the convalescent consultation for patients with COVID-19 from April to June 2021 at Ramón López Peña Community Polyclinic in Santiago de Cuba. **Results**: The largest number of diagnosed was 66 patients (41.5%) and symptoms lasted from 15 to 30 days after the acute phase of the disease (62.2%). The female sex prevailed in 65.4% and the age group ranged 50 to 59 years (43.4%). Arterial hypertension and diabetes mellitus were the comorbidities with the highest incidence in the casuistry in 41.9% and 27.2%, respectively. Fatigue, headache and psychological disorders were the most significant prolonged symptoms in 58.2%, 44.5% and 35.6% respectively.

**Conclusions**: Among the patients followed up in the convalescent consultation for COVID-19, the proportion of presence of comorbidities is higher and fatigue is the most frequent complaint.

**Keywords**: pandemic; COVID-19; SARS-CoV-2; post covid syndrome.

**a12\_2413**

**Dipeptidyl Peptidase 4 and its Function against COVID-19**

La dipeptidil peptidasa 4 y su función frente a la COVID-19

**ABSTRACT**

Given the appearance of a "new virus" in the of Wuhan city, China, called SARS-CoV-2, which causes the well-known severe acute respiratory syndrome (COVID-19), many scientists are trying to find a solution against the virus that has caused a pandemic. In this search, a transmembrane glycoprotein called dipeptidyl peptidase 4 or DPP-4 was found present on the surface of different types of cells and a target in MERS-Co-V infection, which opens hope by suspecting that DPP- 4 can be a target in different coronaviruses by serving as a therapeutic strategy. Added to this, there are results that find elevated DPP-4 in patients with severe complications from COVID-19, which may be a possible marker of severity. However, there is still little emphasis on the identification and association of this glycoprotein with COVID-19. To this effect, a bibliographic review was carried out on the most significant aspects of Dipeptidyl Peptidase 4 and its function against COVID-19.

**Keywords**: dipeptidyl peptidase 4; COVID-19; dipeptidyl peptidase 4 inhibitors.

**a13\_2584**

**Bioactive Metabolites Generated by Intestinal Dysbiosis and their Pathophysiological Implications in Cardiovascular Disease**

Metabolitos bioactivos generados por la disbiosis intestinal y sus implicaciones fisiopatológicas en la enfermedad cardiovascular

**ABSTRACT**

**Introduction**: Dysbiosis is known as the alteration of the symbiotic relationship between the intestinal microbiota and the host is involved in the pathogenesis of atherosclerotic cardiovascular disease.

**Objective**: To carry out a documentary review on the pathophysiological mechanisms that relate the bioactive metabolites generated by intestinal dysbiosis with the development and progression of atherosclerotic cardiovascular disease.

**Methods**: The Google Scholar search engine was used and free access articles were consulted in Pubmed, SciELO, Lilacs, Cumed and Hinari databases from September 2020 to March 2021. The keywords used for this review were “microbiome”, “gut microbiota”, “dysbiosis”, “atherosclerosis”, “cardiovascular disease” and their English equivalents, according to the Health Sciences (DeCS) descriptor. Original articles, review articles, systematic reviews and meta-analyses after 2015 were considered. A total of 73 articles were reviewed.

**Findings**: The pathophysiological relationships between intestinal dysbiosis and cardiovascular diseases are complex, since they influence each other through their endogenous toxins (bioactive metabolites), the circulatory system, immune responses and metabolic changes. Future research should focus on elucidating the underlying molecular players and on identifying whether the pathways that interconnect gut dysbiosis with ACE are causal, correlational, or consequential.

**Conclusions**: The accumulated evidence supports that the dysbiosis of the intestinal microbiota is involved in the synthesis of proatherogenic metabolites which modulate the mechanisms involved in the pathophysiology of ACE.

**Keywords**: intestinal microbiota; dysbiosis; atherosclerosis; cardiovascular disease; metabolic syndrome.

**a14\_2586**

**The Epidemiology of Pulmonary Hypertension**

La epidemiología de la hipertensión pulmonar

**ABSTRACT**

From current perspectives, pulmonary hypertension is considered a major health problem. The present work was carried out to identify the epidemiological characteristics and natural history of pulmonary hypertension in the international context and mainly in the Americas. Knowledge of the epidemiology of pulmonary hypertension has undergone a remarkable development with the results of the American, French, and Swiss registries, among others. Initial reports considered that the disease affected young patients (average age 36 years), being almost twice more frequent in women than in men (1.7:1) and with an incidence of 1-2 cases/1,000,000 inhabitants/ year and affects all age groups. Current estimates suggest a prevalence around 1% of the world population and increases to 10% in those over 65 years of age. Left atrial or left ventricular disease and pulmonary diseases are the most common cause of pulmonary hypertension. In Cuba there are no epidemiological data available on this entity. The programs that help their knowledge by the medical population must be reinforced and promote a single data registry.

**Keywords**: pulmonary hypertension; epidemiology; record.

**a15\_2728**

**Spontaneous Pneumomediastinum in a Patient with COVID-19**

Neumomediastino espontáneo en paciente con COVID-19

**ABSTRACT**

**Introduction**: Spontaneous pneumomediastinum or Hamman syndrome is a rare and infrequent complication. It is defined as the presence of air or gas within the mediastinum without an identified cause.

**Objective**: To report a clinical case of spontaneous pneumomediastinum in a patient with COVID-2019, a disease with a rare complication.

**Clinical case report**: We report the case of an 86-year-old patient with a clinical condicion of fever of 38o C and respiratory symptoms (cough with whitish secretions, dyspnea on moderate exertion). He underwent a polymerase chain reaction test for coronavirus disease 2019, which resulted positive. On the fourth day of his hospitalization, he his clinical condition worsened, including cough and progressive dyspnea accompanied by oxygen saturation less than 91%. The presence of pneumomediastinum was revealed by high-resolution imaging studies (computed tomography angiography of the chest).

**Discussion**: The 2019 coronavirus disease pandemic has given rise to a global public health emergency, which requires health personnel to be familiar with symptoms, imaging results, and complications of this disease, such as pneumomediastinum found in this case.

**Conclution**. Spontaneous pneumomediastinum is a rare complication that occurs in the inflammatory phase of this disease.

**Keywords**: coronavirus disease; COVID-19; spontaneous pneumomediastinum.

**a16\_2352**

**Presentation of a Case of Cardiac Bronchus Diagnosed by Endoscopic Study**

Presentación de un caso de bronquio cardiaco diagnosticado por estudio endoscópico

**ABSTRACT**

**Introduction**: The cardiac bronchus is a rare congenital anomaly, with an incidence of approximately 0.1%. It consists of a supernumerary bronchus that arises from the medial wall of the right main bronchus or the bronchus intermediary, opposite the origin of the bronchus for the right upper lobe and proximal to the bronchus of the apical segment of the right lower lobe.

**Objective**: To report the case of a cardiac bronchus diagnosed by endoscopic study.

**Case report**: We report the case of a patient who was admitted to the Pneumology service at Hermanos Ameijeiras Surgical Clinical Hospital due to cough, white expectoration, dyspnea on exertion and a chest X-ray with radiopacity in the upper lobe, and that as an incidental finding during the bronchoscopy, a cardiac or supernumerary bronchus was detected.

**Conclusions**: Bronchus is an infrequent congenital malformation that can be asymptomatic, whose definitive diagnosis is by bronchoscopy.

**Keywords**: Cardiac bronchus; supernumerary bronchus; bronchoscopy

**a17\_2703** (Imágenes en Medicina. No lleva resumen)

**Tomographic Diagnosis of Primary Spleen Angiosarcoma with Bone Metasteses**

Diagnóstico tomográfico de angiosarcoma esplénico primario con metástasis ósea

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