

Abstracts congresos internacionales 2009

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DEPARTAMENTO DE ANATOMÍA PATOLÓGICA

30th SYMPOSIUM OF THE INTERNATIONAL SOCIETY OF DERMATOPATHOLOGY - SANTIAGO, CHILE – 28 AL 31 OCTUBRE.

PARANEOPLASTIC DERMATOMYOSITIS DUE TO RENAL CELL CARCINOMA.

Fernando Valenzuela, Marlene Waissbluth, Miguel Espinoza, Gabriela Strauch, **Laura Carreño.**

The case of a 72-year-old-man with diabetes mellitus is presented. He consulted for a 4-month pruritic erythematoviolaceous macules on the face, neck, and chest unresponsive to antihistaminics or topical corticosteroids. The lesions progressed to heliotrope rash, Gottron sign, nail-fold telangiectases, and erythema on the abdomen and lateral aspects of thighs, together with marked asthenia, anorexia, and 10 kg weight loss. The diagnosis of dermatomyositis as a paraneoplastic phenomenon was suggested and clinical, imaging, and laboratory workup for neoplasia was carried out. Laboratory tests evidenced a hypochromic microcytic anemia, erythrocyte sedimentation rate 120, and CK40 U/L. Images showed multiple mediastinal, perirenal, and suprarenal adenopathies, 2 pulmonary masses, renal tumors, and inferior cava and left renal vein thrombosis. A skin biopsy showed interface vacuolar dermatitis and superficial and mid dermal lymphoplasmacytic infiltrate with mucinosis. A videothoracoscopy biopsy revealed a poorly differentiated carcinoma, staining positive for keratin, vimentin, CD10, and EMA, consistent with metastatic renal cell carcinoma. The diagnosis of paraneoplastic amyopathic dermatomyositis secondary to renal cell carcinoma was confirmed.

PERINEURIOMA OF THE NAIL BED: A CASE REPORT.

Claudia Morales, Daniela Merino, Verónica Catalán, Laura Carreño, Paloma Robles, Ximena Wortsman.

Background: Perineuriomas are uncommon tumors composed of perineurial cells with immunoreactivity for vimentin and epithelial membrane antigen. Methods: We report the case of a 44-year-old female with no clinical evidence of neurofibromatosis and a nodular tumor in the nail bed of the third finger. Grossly, the tumor was a well circumscribed, firm nodule (10 3 7 3 5 mm in size). The cut surface was whitish, homogeneous, and solid. Histologically, it was an unencapsulated mass composed of spindle cells with elongated and wavy nuclei; fine granular chromatin; and wavy, slender, strikingly elongated cytoplasmic processes, in a background of collagen. Necrosis and mitotic figures were not observed. Results: Spindle cells stained positive for epithelial membrane antigen and vimentin and were negative for S-100 protein and actin. Conclusion: We report a unique case of perineurioma arising in relation to the finger nail bed and discuss the differential diagnosis of perineurioma.

CD1A IN GRANULOMA ANNULARE: A RESPONSE PATTERN.

Laura Carreño Toro, Ivo Sazunic Yáñez, Claudia Morales Huber, Verónica Sanhueza Linares.

Langerhans cell or dendritic follicular cell (DFC) is an antigen-presenting cell, identifiable by CD1a staining, and present in the epidermis. Literature review shows few data on the amount and distribution of these cells in classic granuloma annulare (GA). The aim of this study was to analyze Langerhans cells in GA. Eleven cases of GA diagnosed between 2005 and 2009 were obtained from the database of

Hospital Clínico Universidad de Chile. The histology was reviewed by 3 pathologists who evaluated inflammatory infiltration, dermal mucin, collagen necrobiosis, and presence of CD1a+ cells both in the epidermis and the dermis. These parameters were quantified as mild, moderate, or intense. All cases had some degree of inflammatory infiltration formed by lymphocytes and histiocytes, and most (9 of 11) had eosinophils. Six cases had increased DFC in the dermis and the epidermis and in some cases, also in the hair follicle. These cases were precisely those associated to a more prominent inflammatory infiltration. We postulate that GA is an evolutionary injury and that in early stages DFC can be increased associated to increased inflammatory infiltration.

DEPARTAMENTO DE CARDIOLOGÍA

AMERICAN COLLEGE OF CARDIOLOGY, SCIENTIFIC SESSIONS 2009 - ORLANDO, USA – 29 AL 31 MARZO.

PREVENTION OF POSTOPERATIVE ATRIAL FIBRILLATION WITH THE SUPPLEMENTATION OF OMEGA 3 PUFA PLUS ANTIOXIDANT VITAMINS IN PATIENTS UNDERGOING CARDIAC SURGERY WITH EXTRACORPOREAL CIRCULATION.

Mauricio Cereceda, Ramón Rodrigo, **Rodrigo Castillo**, Rodrigo Pizarro, **René Asenjo**, **Jaime Zamorano**, Julia Araya, **Rodrigo Castillo-Koch**, **Juan Espinoza**, **Luigi Laggazzi**.

Reactive oxygen species have been involved in the pathogenesis of postoperative atrial fibrillation in cardiac surgery with extracorporeal circulation due to the unavoidable occurrence of an ischemia-reperfusion cycle. Omega 3 polyunsaturated fatty acids (PUFA) enhance antioxidant enzymes in experimental models, an effect likely to protect against oxidative challenges of myocardium. Supplementation with antioxidant vitamins C and E would further reinforce the antioxidant defences. Eighty three patients scheduled to cardiac surgery with extracorporeal circulation were randomized to either placebo (n=41) or supplementation with omega 3 PUFA (1 g/12 h) followed by vitamin C (500 mg/12h) and vitamin E (400 IU/24 h) (n=42) from 7, 2 and 2 days prior to surgery. Blood samples were drawn throughout the protocol. Right atrial appendages were dissected during surgery to determine the reduced/oxidized glutathione ratio (GSH/GSSG) and biomarkers of oxidative damage such as malondi-aldehyde and protein carbonylation. Western blot was used to determine the expression of the catalytic (NOX-2) and the cytosolic (p47phox) subunits of NADPH oxidase. The activity of catalase (CAT), superoxide dismutase (SOD) and glutathione peroxidase (GSH-Px) were measured in atrial tissue and erythrocytes. The supplementation reduced the incidence of atrial fibrillation by 73%. In atrial tissue, supplemented group exhibited 21% lower lipid peroxidation than placebo group (p<0.03) and lower expression of NOX-2/gp91phox and p47phox subunits. The activities of CAT, SOD and GSH-Px were 132%, 35% and 49% higher in the supplemented patients respect to placebo ones, respectively. In contrast, the activity of the antioxidant enzymes in erythrocytes was not different between groups. Atrial MDA levels correlated to plasma MDA levels (r=0.7484, p<0.0001). Plasma MDA was 16.8% higher in patients who developed atrial fibrillation (p<0.05). Data are consistent with an adaptive antioxidant response in atrial tissue following omega 3 PUFA exposure. Supplementation with omega 3 PUFA plus antioxidant vitamins attenuates the myocardial biochemical and functional injury and markedly decreases the occurrence of postoperative atrial fibrillation.

HEART FAILURE 2009 CONGRESS – NIZA, FRANCIA – 30 MAYO AL 2 JUNIO.

ANEMIA IN ACUTE DECOMPENSATED HEART FAILURE: RELATION WITH AMINO TERMINAL BRAIN NATRIURETIC PEPTIDE AND ULTRASENSIBLE C REACTIVE PROTEIN.

L. Sepúlveda Morales, C. Trejo, **M. Llancaqueo**, **H. Sanhueza**.

Background: Anemia occurs commonly in patients with acute decompensated heart failure (ADHF) and it is related with more neurohumoral activation and with pro inflammatory state. Objectives: The present study aims to investigate the relation between anemia and neurohumoral activation and inflammation, with amino terminal brain natriuretic peptide (NTproBNP) and ultrasensible C reactive protein (usCRP), in Chilean patients with acute decompensated heart failure (ADHF). Method: This is a prospective study in Chilean patients who were admitted with ADHF. We recorded demographics data, clinics and laboratories variables including hemoglobin (Hb), hematocrit, TSH, renal function, ECG and echocardiogram, NT-proBNP, usCRP. In anemic patients we got vitamin B12 level, folic acid level, iron blood level and ferritin. We use WHO definition of anemia: Hb < 13 gr/dl for men and Hb<12gr/dl for women. Patients with infections or creatinine > 2,5 mg/dl were excluded. Results: From August 07 to August 08, 97 patients were admitted with ADHF in a single center. 51.5% males, and ages average 69.5 (27 to 89). Etiologies of heart failure were: ischemic 40.2%, hypertension 29.9%, valvular 13.4%, idiopathic 12.3% and others 4.1%. 38.14% were anemic. The anemic patients had a significantly higher NT-proBNP levels (13499 pg/ml ± 11919 vs. 8873 pg/ml ± 9069, p <0.05) than no anemic. There was no difference in usCRP (32.6mg/l ± 28 vs. 21 mg/l ± 27, ns). 75% of the anemic patients had anemia of chronic disease. These patients had significantly higher NT-proBNP (17078 pg/ml ± 12490 vs. 8873pg/ml ± 9069, p<0.01) and usCRP (38.3 mg/l ± 30 vs. 21 mg/l ± 27. p < 0.05). Patients with iron deficiency (18%) did not present significant differences in NT-proBNP (5021 pg/ml ± 2798 vs. 8873 pg/ml ± 9069, ns) neither usCRP levels (10.3 mg/l ± 9 vs 21 mg/l ± 27t, ns). Conclusions: In this Chilean patients cohort with ADHF, anemic patients had more neurohumoral activation, with significantly higher NT-proBNP levels. Patients with anemia of chronic disease had more neurohumoral activation and inflammation, with higher concentrations of NT-proBNP y usCRP, then anemia of chronic disease may be a marker of more severe heart failure.

FREQUENCY AND ETIOLOGY OF ANEMIA IN CHILEAN PATIENTS WITH ACUTE DECOMPENSATED HEART FAILURE.

L. Sepúlveda Morales, C. Trejo, M. Llancaqueo, H. Sanhueza.

Background: Anemia is common in patients with heart failure. There are not data about it in Chilean patients. Purpose: The present study aims to investigate the frequency, etiology and characteristics of anemia in patients with acute decompensated heart failure (ADHF). Methods: This is a prospective study in Chilean patients who were admitted with ADHF. We recorded demographics data, clinics and laboratories variables including Hb, hematocrit, TSH, renal function, ECG and echocardiogram. In anemic patients we got vitamin B12 level, folic acid level, iron blood level and ferritin. We use WHO definition of anemia: hemoglobin (Hb) < 13 gr/dl for men and Hb<12gr/dl for women. We did not study anemia and hemodilution in this group. Results: From August 07 to August 08 97, patients were admitted with ADHF in a single center. 51.5% males, and ages ranged from 27 to 89 (average 69.5). Etiologies of heart failure were: ischemic 40.2%, hypertension 29.9%, valvular 13.4%, idiopathic 12.3% and others 4.1%. 38.14% were anemics with Hb = 11gr/dl vs 14gr/dl in no anemic patients. There are no differences in genre (males 54% vs 50%, ns), and age (70.16 vs. 69.18, p= ns) when we compared anemic versus no anemic patients. The average ejection fraction (EF) was 33% in both groups. The anemic had a significantly higher creatinine (1,45mg/dl + 2.3 vs 1.2 mg/dl + 0.6, p < 0.01) and there were more diabetics (37.8% vs. 20%, P< 0.05). 75% patients had anemia of chronic disease, 18% iron deficiency, 6.6% vitamin B12 deficiency and 3.2% hypotiroidism. Anemic patients with EF< 50% were younger, with more anemia of chronic disease (87%) versus anemic patients with EF>50% who had 66.6% anemia of chronic disease and had more hypertension. Conclusions In this cohort anemia is common in heart failure, and is associated with renal failure and diabetes. The most common etiology is anemia of chronic disease and then iron deficiency. Patients with systolic heart failure had more frequently anemia of chronic disease.

DEPARTAMENTO DE NEUROLOGÍA Y NEUROCIRUGÍA

61st ANNUAL MEETING OF THE AMERICAN ACADEMY OF NEUROLOGY - SEATTLE, USA – 25 ABRIL AL 2 MAYO.

NON-MOTOR SYMPTOMS IN GENETIC FORMS OF PARKINSON DISEASE.

Meike Kasten, Lena Kertelge, Norbert Brüggemann, Johann Hagenah, Alexander Schmidt, Vera Tadic, Susanne Steinlechner, **Maria Isabel Behrens**, Alfredo Ramírez, Heiner Raspe, Rebekka Lencer, Christine Klein.

Objective: To review current knowledge on non-motor-symptoms (NMS), particularly psychiatric features, in monogenic forms of Parkinson disease (PD) in the literature and in a pilot study. Background: NMS are recognized as important features in monogenic forms of PD. Design/methods: A Medline search spanning the years 1966-2008 was performed using the search terms “parkinson” and the name of known PD genes. This resulted in 1,855 citations, 305 of which included genetic information; 119 articles contained information on any type of NMS (990 cases). In addition, we analyzed a pilot data set of 23 patients with genetic (SNCA, LRRK2, Parkin, PINK1, ATP13A2) compared to 63 with non-genetic PD (IPD) with age at onset at or before age 50 (IPD EOPD) and with a Hoehn&Yahr stage of 1-2 (IPD mild) for presence of NMS. We focused on hallucinations, dementia, depression, anxiety, and sleep disturbances. RESULTS: The number of cases with available information, methods and case characteristics differed widely across studies. Overall, hallucinations and dementia were most frequently commented on. Detailed information on psychiatric symptom frequencies in the literature include hallucinations: SNCA:10/43(23%); Parkin:7/206(3%); PINK1:9/60(15%); LRRK2:37/216(17%); ATP13A2:6/8(75%) dementia: SNCA:11/43(26%); Parkin:3/62(5%); PINK1:6/54(11%); LRRK2:35/314(11%); ATP13A2:4/8; depression: SNCA:16/43(37%); Parkin:22/207(8%); PINK1:25/64(30%); LRRK2:58/204(28%). In our pilot data set we found hallucinations: Parkin:1/4; PINK1:0/5; ATP13A2:1/6; IPD EOPD:7/26(27%); IPD mild:5/25(20%); dementia: Parkin:0/4; PINK1:0/6; ATP13A2:2/6; IPD EOPD:0/29; IPD mild:0/18; depression: Parkin:1/4; PINK1:2/6; ATP13A2:3/6; IPD EOPD:7/28(25%); IPD mild:8/28(29%). Conclusions/relevance: There is limited data on NMS in genetic forms of PD. Overall, the frequency of psychiatric features in patients with genetic PD does not appear to be higher and may even be lower than in idiopathic PD. Possible exceptions include the occurrence of specific psychiatric disorders in PINK1-linked disease or of dementia in SNCA-associated PD. Psychiatric symptoms should be considered as important and often treatable concomitant features of genetic PD. Supported by: not applicable

HETEROZYGOUS ATP13A2 MUTATIONS ASSOCIATED WITH DOPAMINERGIC DYSFUNCTION.

Norbert Brüggemann, Alexander Schmidt, **Maria I. Behrens**, Alfredo Ramírez, Joyce P. M. van der Vegt, Ana Djarmati, Hartwig Siebner, Ferdinand Binkofski, Manfred Bähre, Johann Hagenah, Christine Klein.

OBJECTIVE: To determine clinical features, dopaminergic function and transcranial ultrasound (TCS) findings in heterozygous and compound-heterozygous ATP13A2 mutation carriers of a Chilean pedigree. BACKGROUND: Kufor-Rakeb Syndrome (KRS) is a rare form of autosomal-recessive parkinsonism characterized by juvenile-onset levodopa-responsive bradykinesia, dementia, supranuclear gaze palsy and pyramidal degeneration caused by mutations in the ATP13A2 gene (PARK9 locus). Previous clinical, epidemiological and neuroimaging studies suggest a possible pathogenic role of heterozygous mutations in other recessive parkinsonism genes such as Parkin and PINK1. DESIGN/METHODS: All eight family members were clinically investigated by two

movement disorders specialists blinded to mutational and neuroimaging status. TCS of the brainstem was performed to evaluate the area of substantia nigra echogenicity (aSN). Six siblings (including one compound-heterozygous, three heterozygous, two without mutations) were available for striatal 123I-FP-CIT SPECT to visualize nigrostriatal function. RESULTS: The only living KRS patient of this family with compound heterozygous mutations presented with juvenile onset parkinsonism (UPDRSIII: 51), supranuclear gaze palsy, limb spasticity and dementia. The 79-year old heterozygous mother showed a mild asymmetric, hypokinetic-rigid syndrome (UPDRSIII: 17). The heterozygous siblings had subtle, unilateral motor signs, whereas examination of both intrafamilial mutation-negative controls was unremarkable. In all cases the genetic status was correctly predicted by the clinical examination. None of the examined probands had a significantly increased aSN >0.25 cm². As predicted, the striatal FP-CIT uptake was markedly decreased in the affected carrier of two mutated alleles, indicative of a severely impaired nigrostriatal function. Asymptomatic heterozygous siblings also showed abnormal SPECT scans with a tendency to age-related reduced transporter density with an obvious asymmetric distribution. CONCLUSIONS/RELEVANCE: Single heterozygous mutations in ATP13A2 may impair nigrostriatal function and should therefore be considered as a susceptibility factor for parkinsonism. In contrast to PINK1- and Parkin, SN signal was not increased in ATP13A2 mutation carriers. Supported by: This work was supported by a Lichtenberg Grant from the Volkswagen Foundation. Christine Klein is a recipient of a Schilling Award of the Hermann and Lilly Schilling Foundation.

AMERICAN ACADEMY OF NEUROLOGICAL AND ORTHOPAEDIC SURGEONS 33RD ANNUAL SCIENTIFIC MEETING - QUEBEC, CANADÁ- 28 AL 30 MAYO.
AUTOMATED PERCUTANEOUS NUCLEOTOMY AND NUCLEOLYSIS WITH OZONE IN THE TREATMENT OF LUMBAR RADICULOPATHY.
Leonel Pérez, **Marcos Babor, Pedro F Vázquez**, Christine Limonte.

Purpose: To evaluate the efficacy of a mixed technique, automated percutaneous nucleotomy (APN) and nucleolysis with ozone, in the treatment of lumbar radiculopathy due to herniated nucleus pulposus (HNP), including patients who by the authors criteria, do not obtain positive results with APN alone. Method: A retrospective study of 105 patients was conducted. All patients suffered from lumbar radiculopathy and were treated with the mixed technique between November 2006 and August 2008. Average age was 43 years, ranging from 23 to 78 y/o. Kambin's lateral approach for access and a system of dilating tubes were utilized. Under local anesthesia, the patients were placed in the lateral decubitus position and with the use of C-Arm fluoroscopy, the nucleotome was introduced. An automated nucleotomy was performed removing 1-2cc of nucleus pulposus. Then, 10-15 cc of O₃ were injected twice and once again after the nucleotome was removed to just outside the annulus. Results: Clinical follow up was provided up to 36 months. A modified MacNab scale was used. The results were: 60% Excellent, 22.8% Good (82.8% success), 9.6% Acceptable, 7.6 % Poor. Conclusion: In the author's experience, APN alone yields excellent results when a strict selection criteria is utilized, excluding elderly patients, patients with a ruptured annulus and with a longer preoperative course. However, combining APN and nucleolysis with ozone may broaden the selection criteria to include these patients who traditionally do not do as well with APN alone. The minimally invasive approach with satisfactory results is another added benefit.

DEPARTAMENTO DE OBSTETRICIA Y GINECOLOGÍA

WORLD CONGRESS ON ULTRASOUND IN OBSTETRICS AND GYNECOLOGY - HAMBURGO, ALEMANIA – 28 AL 30 MAYO.
MECHANICAL FETAL PR INTERVAL ASSESSMENT USING STANDARD AND MODIFIED TEI INDEX APPROACH IN NORMAL POPULATION.

D. Pedraza, H. Muñoz, J. Jiménez, S. Pohlhammer, M. Rodríguez, **M. Parra**, A. Hernández, M. Yamamoto, V. Acevedo.

Objective: The aim of this investigation was evaluate the feasibility and reliability of fetal PR interval measured by two different strategies using pulsed Doppler in second half of pregnancy. 10 Ultrasound in Obstetrics & Gynecology 2009; 34 (Suppl. 1): 1–61 Methods: Routine two dimensional fetal scans were performed in 123 consecutive singleton pregnancies during the second half of pregnancy. General Electric E8 ultrasound equipment was used in all cases. Mechanical PR interval was measured from the onset of the mitral A wave to the onset of the aortic ejection flow, using previously described technique for standard and modified Tei index. All measurements were taken twice by two different operators. For statistical analysis mean and standard deviation was used position measurement. For comparison between two groups and the inter observer agreement Least square analysis was performed. Results: The mechanical PR interval was easily obtained in all 123 cases. The mean gestational age was 25.5 weeks (18–38 weeks). The PR interval was 117,97ms (SD: 9.49 mseg), in standard Tei index group, and 119,11ms. (SD: 10.71 m seg) in modified Tei index group. There was a positive correlation between PR interval and gestational age (COV 2.48). There was no significant difference between both groups (t student 99%:261 > t calculated –0,068). Difference between Inter observer was not significant (t student 99%: 2,61 > t calculated –0.087). Conclusion: The pulsed Doppler assessment using standard and modified Tei index approach of the mechanical PR interval in the fetus, is a feasible and could be used to explore the fetal atrio ventricular conduction abnormalities. It is reproducible and easily obtained during the routine second half of gestation and the normal range is similar to that described with other methods.

USEFULNESS OF CERVICAL ASSESSMENT AND UTERINE ARTERY DOPPLER AS SCREENING TEST FOR SPONTANEOUS EARLY PRETERM DELIVERY DURING THE FIRST TRIMESTER OF PREGNANCY.

Mauro Parra-Cordero, Rodrigo Terra, Marcelo Rodríguez, **Rafael Caballero**, **Guido Juárez**, Gustavo Rencoret.

Objective: To evaluate the role of ultrasound cervical length and uterine artery Doppler at 11+0 to 13+6 weeks gestation as a predictors of spontaneous early preterm birth in an unselected Chilean population. **Methods:** This is an ongoing prospective study involving 1,944 asymptomatic women with a singleton pregnancies attending for nuchal translucency scan at 11+0-13+6 weeks gestation, who underwent standardized transvaginal scan for evaluation of cervical length and uterine artery Doppler. After exclusion of chromosomal or structural abnormalities, abortion, preeclampsia, small-for-gestational-age fetuses, placental abruption, chronic maternal diseases, cervical cerclage or history of cervical surgery, 1,401 pregnant women were finally studied. Maternal characteristics and ultrasound variables were studied using a multiple regression analysis as predictor of delivered spontaneously before 34 weeks. **Results:** The rate of spontaneous preterm delivery (SPD) before 34 weeks gestation was 2.7% (n=38). Previous history of preterm delivery was present in 9.7% of multiparous women. No significant difference was found in the uterine artery mean pulsatility index (1.56 ± 0.43 vs. 1.53 ± 0.45) and cervical length (35.4 ± 4.8 vs. 36.4 ± 5.3 mm) between both groups. However, multiple regression analysis demonstrated that previous history of preterm delivery and nuchal translucency thickness was significantly and independently associated with early SPD, being calculated a detection rate of 26% with 10% false positive rate. **Conclusion:** Spontaneous preterm delivery is a complex and heterogenic syndrome, which has been associated with abnormal spiral artery remodeling and cervical dysfunction. Unlike second trimester findings, those ultrasound markers were not associated with early spontaneous preterm delivery. However, our novel finding that increased nuchal translucency was associated with subsequently SPD necessitates to be further evaluated.

8th EUROPEAN CONGRESS ON MENOPAUSE (EMAS) – LONDRES INGLATERRA – 16 AL 20 MAYO.

ROLE OF GONADOTROPINS IN THE EXPRESSION OF NERVE GROWTH FACTOR AND ITS HIGH-AFFINITY RECEPTOR TRKA IN EPITHELIAL OVARIAN CANCER.

C. Romero, M. Muñoz, X. Campos, F. Gabler, **L. Moyano**, **A. Selman**, **M. Vega**.

Objectives: To evaluate the role of gonadotropins in trkA and NGF expression in explants of EOC and to examine whether the changes in NGF and trkA expression are related to ovarian carcinogenesis progression. **Methods:** Seven EOC explants were incubated with FSH and LH (10mUI/L and 100mUI/L) and also with LH+FSH (50mUI/L and 500 mUI/L). NGF produced by explants was detected by ELISA in culture media. trkA expression was detected by immunohistochemistry. During carcinogenesis progression, NGF and trkA expression was evaluated by immunohistochemistry in 42 samples of ovarian tissues (n= 5 for each group: Inactive ovary, benign tumor, borderline tumor and EOC (grade I, II, III)). **Results:** In EOC explants, FSH (10 mIU/L) and FSH+LH (500 mIU/L) stimulated NGF levels ($p < 0.05$), whereas, trkA protein expression augmented with FSH (10 mIU/L), LH (100 mIU/L) and FSH+LH (500 mIU/L) ($p < 0.05$). During ovarian carcinogenesis progression, a gradual increased of NGF and trkA expression was observed ($p < 0.001$: EOC vs inactive ovary). **Conclusions:** Based on the high gonadotropin levels during menopause, the data of this study suggest a role for gonadotropins in ovarian carcinogenesis progression.

CONGRESO MUNDIAL DOHAD 2009 (DEVELOPMENTS ORIGINS OF HEALTH AND DISEASE) – SANTIAGO, CHILE -19 AL 22 NOVIEMBRE.

FIRST TRIMESTER ADIPONECTIN AND SUBSEQUENT DEVELOPMENT OF PREECLAMPSIA OR FETAL GROWTH RESTRICTION.

E. Valdés, K. Lattes, **H. Muñoz**, S. Hirsch, P. Barja, **K. Papapietro**, M. Cumsille.

Objective: The purpose of this study is assessing the utility of determining the maternal serum concentration of adiponectin (ApN) as a marker for insulin-resistance in the prediction of Preeclampsia (PE) and Fetal Growth Restriction (FGR) during the first trimester. **Methods:** A prospective, case-control study was conducted in which 1094 pregnant women who received the 11-14 wk ultrasound screening and delivered their babies at University of Chile's Clinical Hospital's Fetal Medicine unit were enrolled. Informed consent and blood samples were obtained and kept at -80°C (-112°F) for future analysis. Among this population, we recruited 10 women who developed PE, 10 who developed IUGR and a control group of 40 healthy women. ApN concentrations in maternal serum were determined using a commercial ELISA kit. PE was defined as recommended the International Society for the Study of Hypertension in Pregnancy (3). FGR was defined as growth at the 10th or less percentile for weight of all fetuses at that gestational age using a growth curve representative of Chilean population (4). We studied the relationship between maternal serum concentration of ApN and variables like newborn weight and maternal BMI. Institutional ethics committee clearance and participants' informed consent were obtained. **Results:** There were no significant differences between studied groups regarding age, parity, gestational age and tobacco consumption (Table 1) There were no significant differences among first-trimester ApN serum levels in the groups. Average concentration was 8, 6.8 and 10.8 ng/ml for controls, PE and FGR groups, respectively. However, there was a significant difference between the groups after adjusting for BMI ($p < 0.046$). There was also a significant inverse relationship between ApN levels and maternal BMI ($r = -0.36$; $p = 0.005$) except for the control group (Figure 1). A significant negative relationship ($r = -0.37$; $p = 0.002$) was found when correlating maternal ApN levels with weight percentiles at birth for the whole group (60 patients). Similar results were obtained when analyzing both variables in

the control group ($r = -0,36$; $p=0,002$). Conclusions: In our study, maternal serum ApN levels were not useful in predicting development of PE and FGR. However, maternal serum ApN concentration adjusted by BMI was significantly higher during the first trimester in women who developed FGR. It is also of interest the negative relationship between ApN levels and weight at birth.

DEPARTAMENTO DE CIRUGÍA

2009 SCIENTIFIC SESSION OF THE SOCIETY OF AMERICAN GASTROINTESTINAL AND ENDOSCOPIC SURGEONS (SAGES) - PHOENIX, USA – 22 AL 25 ABRIL.

LAPAROSCOPIC MANAGEMENT OF PATIENTS WITH EARLY FORMS OF GALLBLADDER CANCER.

Xabier de Aretxabala, Jorge León, Iván Roa, Juan Hepp, **Fernando Maluenda**.

Introduction: Laparoscopy can represent an useful tool in the management of patients undergoing reoperation for gallbladder cancer detected after the study of the cholecystectomy specimen. The aim of this study is to evaluate the feasibility and outcome of a series of patients undergoing initial laparoscopic management. Methods and Procedures : According a prospective protocol, between July 2005 and January 2008, 16 patients (two males, median age 56 years) harboring a gallbladder cancer detected after the exam of the cholecystectomy specimen were admitted. Of these, 11 had invasion of the subserosal layer (T2), four of the serosa, (T3) and one of the muscle layer (T1b). Of the patients, 5 had undergone a previous open cholecystectomy while 11 had a laparoscopic procedure. Lymph node metastasis, peritoneal recurrence and technical difficulties were indications for conversion Results: All patients underwent laparoscopic reoperation. Intervention was finished after the initial exploration in three patients. Of these, in one patient peritoneal recurrence was observed while the other two patients did not have a good general condition to perform the resection. Conversion to an open procedure after a negative exam of the abdominal cavity was performed in 9 patients. Of these patients, in three the open exploration allowed the detection of metastatic tumor undiscovered during the laparoscopic procedure. Main cause of the lack of detection was the presence of dense adhesions in the subhepatic area that made difficult a complete exam. In the rest of patients and after a negative open exploration a lymphadenectomy associated with the resection of segments IVb and V was performed. In four patients and after a negative laparoscopic exploration, the resection by laparoscopy was attempted. Carbon dioxide pressures were maintained between 8–12 mmHg. In general, 5 ports including two 10/12 ports were employed. Of these patients, in three a complete lymphadenectomy of the hepatic pedicle associated with the resection of the gallbladder bed was performed . In the other patient, the presence of a metastatic lymph node in the hepatoduodenal ligament was the indication to finish the resection after conversion. Laparoscopic liver resection was performed using harmonic and stapling for large vessels. Surgical specimen was extracted through an enlarged port. Neither postoperative morbidity nor mortality was observed in the series . Perioperative blood transfusion was not employed in any of the patients. Among those undergoing resection, recurrence was observed only in one patient, while the rest of patients are alive and free of recurrence with a complete follow-up. Conclusion: Laparoscopy may be employed in the management of patients with early forms of gallbladder cancer undergoing reoperation. Although the presence of adhesions might result in an inadequate exploration, there is a subset of patients in whom is possible to perform a complete exam. Further, laparoscopic lymphadenectomy and gallbladder bed resection is a promising technique in well selected patients. Larger studies are required to confirm its oncologic value.

INTERNATIONAL SOCIETY FOR DIGESTIVE SURGERY. INTERNATIONAL SURGICAL WEEK 2009 – ADELAIDA, AUSTRALIA – 6 AL 10 SEPTIEMBRE.

EVOLUTION OF TYPE 2 DIABETES IN PATIENTS WITH BODY MASS INDEX BELOW 35 AFTER GASTRECTOMY AND ROUX-EN-Y RECONSTRUCTION.

J.C. Molina, H. Lembach, **A. Csendes**, **E. Lanzarini**, **L. Gutiérrez**.

Introduction: The evolution of type 2 diabetes after bariatric surgery has been widely studied. Beside the weight control it has been systematically demonstrated a normalization or improvement of blood glucose, insulin and glycosylated hemoglobin levels. These procedures exclude the proximal segment of the duodenum and stimulate the distal segment of the jejunum, stimulating the production of incretins. As a consequence of this the increase of insulin secretion produces a remission or improvement of diabetes. We perform a retrospective study to evaluate the evolution of type 2 diabetic patients with a BMI < 35 after non bariatric total or subtotal gastrectomy and Roux-en-Y reconstruction. Material and Methods: Retrospective study of clinical files of type 2 diabetic patients with a BMI below 35 who underwent non bariatric gastrectomy (total or subtotal) with Roux-en-Y reconstruction between January 2002 and December 2008 Results: Of 304 patients, 54 were type 2 diabetics and 19 accomplished the inclusion criteria. Eleven male and 8 female patients, with an average age of 64 years and BMI of 28,7. In every procedure performed the biliary limb was 50 to 70 cm in length. The average evolution time of type 2 diabetes was 6,9 years, and the average post operatory following was 22 months. Before surgery 5 patients were treated with diet, 13 with oral hypoglucemiant and 1 with insulin. After the postoperatory following period, 16 patients have normal glycemic controls without using drugs, 2 treated with oral

hypoglycemics and 1 treated with insulin (the same patient) Conclusions: The exclusion of duodenum and part of the proximal jejunum seems to have an important role in the resolution or improvement of type 2 diabetes in non obese patients who underwent total or subtotal gastrectomy and Roux-en-Y reconstruction.

SLEEVE GASTRECTOMY AND ANTIREFLUX SURGERY FOR MODERATE OBESE PATIENTS WITH GERD.

L. Gutiérrez, I. Braghetto, E. Lanzarini, J. Lasen, O. Korn, J.C. Molina, F. López, G. Hinostraza.

Introduction: Obese patients are prone to develop GERD. Laparoscopic sleeve gastrectomy (LSG) is a common surgical procedure that is effective in achieving significant weight loss but tends to increase GERD symptoms postoperatively. The aim of this study was to show the results of a simultaneous LSG and Laparoscopic fundoplication (LF) in selected patients. Material and Methods: Ten moderate obese patients that suffered GERD were submitted to LSG and LF from January 2005 to August 2008. Mean age was 37 +/- 11.7 years and preoperative BMI was 33.2 +/- 2.1 kg*m-2 . Results: Operative time was 180 +/- 25 min. There were no intraoperative complications or conversion to open surgery. Inhospital stay was 5 +/- 1 day. During hospitalization, all patients were submitted for radiographic evaluation of the anastomosis showing no evidence of leakage (Figure 1 and 2). Follow-up at 18 months postoperatively was performed in four patients. BMI was 27.0 +/- 1.2 kg*m-2 and digestive endoscopy (Figure 3), manometry and ambulatory 24-hour pH monitoring showed no evidence of GERD (Table 1). Most of the comorbidities associated with obesity were solved after 18 months. Eight patients have not completed 12 months of follow-up but they are clinically without complications. Conclusions: Laparoscopic sleeve gastrectomy combined with an antireflux surgery may be an acceptable surgery for moderate obese patients that suffer GERD . Preliminary early postoperative results regarding antireflux and weight-loss effects are promising. Further experience is necessary for more robust clinical conclusions.

SURGICAL TREATMENT OF TYPE 2 DIABETES PATIENTS: PRELIMINARY RESULTS OF MODIFIED GASTRIC BYPASS.

E. Lanzarini, A. Csendes, I. Braghetto, L. Gutiérrez, F. Maluenda, A.M. Burgos, J.C. Molina, H. Lembach.

Introduction: Bariatric surgery is formally indicated in obese patients with body mass index (BMI) over 40 or 35 with comorbidities associated. The improvement in metabolic control in type 2 diabetic patients with a BMI > 35 after bariatric procedures has raised the potential use of these procedures in patients with mild obesity or non obese. Material and Methods: Prospective study includes 11 patients with diagnosed type 2 diabetes and a BMI < 35. These patients underwent a modified gastric bypass, with a 200 cm. biliary limb and a 100 cm. alimentary limb since August 2008. Data were analyzed considering blood glucose levels and the use of drugs to achieve metabolic control. Results: Five male and 6 female patients were included with an average age of 50,3 years, BMI of 31,7. The mean time of type 2 diabetes was 5,2 years. The average postoperative follow up was 4 months and the average preoperative blood glucose level was 175 mg/dl. All patients were treated with oral hypoglycemics, 4 of them with 2 different drugs and 2 with an associated insulin treatment. After the follow up the average BMI was 27,1. Ten patients achieve normal blood glucose levels without using drugs and 1 patient still has blood glucose levels over 126 mg/dl using 1 oral hypoglycemic. None of them need to use insulin for metabolic control Conclusions: Preliminary results shown that modified gastric bypass is an effective procedure to achieve normal blood glucose levels in diabetes type 2 patients with a BMI < 35.

POSTOPERATIVE ENDOSCOPIC AND RADIOLOGIC ASPECTS OF THE ANTIREFLUX BARRIER AS A PREDICTOR FACTOR FOR LATE CLINICAL AND OBJECTIVE REFLUX RECURRENCE AFTER CARDIAL CALIBRATION AND POSTERIOR GASTROPEXY.

I. Braghetto, O. Korn, H. Valladares, C Davanzo, A. Debandi, A. Henríquez.

Introduction: After antireflux procedure 10-15% of patients present failure of the anatomical repair of the esophagogastric junction. The purpose of this paper is to evaluate the early radiological and endoscopic characteristic of the repair and correlate it with the late results in terms of recurrence of the disease. Material and Methods: Prospective study including 90 patients submitted to antireflux surgery which were evaluated 1 month after the operation with radiological (Barium Sulphate) and endoscopy in order to precise the anatomical characteristic of the antireflux wrap. After 3-5 years patients were reevaluated with clinical questionnaire endoscopy, manometry and 24h pH monitoring in order to precise recurrence of the disease. Results: Radiological or endoscopic defective restoration of the new antireflux barrier was observed in 17.7% of cases. In these patients incompetent LES was present in 50% ,endoscopic esophagitis was present in near to 90% and positive acid reflux in 93.3%. Conclusions: Abnormal or defective restoration of the cardia is associated with insufficient antireflux barrier and induce persistence of reflux symptoms, incompetent LES endoscopic esophagitis and abnormal acid reflux. It is mandatory to follow all the surgical details in order to avoid misperforming procedure and to evaluate objectively the results in order to have real data.

VENOUS ADVENTITIAL CYSTIC DISEASE.

M.I. Ramirez, C.F. Ramírez, M. Jr. Ramirez, J.P. Soffia, L.A. Brunet, L. Moyano, J. Herskovic.

Introduction: We know that Adventitial Cystic Disease of arteries is an uncommon condition (we have presented a case in the ISW 2005). Even more rare is the finding of the venous wall cystic disease, with a few cases reported in the surgical literature. Material

and Methods: We report the clinical features of a 56 yr.-old man with a six months evolution pain in the left groin irradiated to the corresponding leg with swelling of the whole extremity. A duplex ultrasound examination revealed complete obstruction of the femoral common vein with occupation of the vessel suspecting a deep venous thrombosis. Then full dose anticoagulant therapy was started, without clinical response after one week. The CT examination and RM image Results: Surgical treatment was performed. Exploration revealed a 4 cm. cystic mass arising in the anterolateral aspect of the common femoral vein. The incision of the cyst released jellous content. A continuous suture on the venous wall was performed. The surgical outcome was uneventful, and long term CT and ultrasound examinations revealed normality of the surgical area. Conclusions: The venous cystic adventitial disease is a very uncommon disease that almost always is misdiagnosed as DVP. A correct diagnosis and surgical treatment are the basement of a good outcome.

DEPARTAMENTO DE DERMATOLOGÍA

12th WORLD CONGRESS ON CANCERS OF THE SKIN - TEL-AVIV, ISRAEL – 3 AL 6 MAYO.

SKIN CANCER SCREENING: RESULTS OF A LOCAL CAMPAIGN IN A CHILEAN HOSPITAL.

P. Calderón, V. Zemelman, K. Valenzuela, C. Valdivia, H. Rojas, J. Honeyman.

Aim: Our hospital organized a skin cancer educational campaign (November 2008) where free skin examinations were offered . The campaign was also directed to educate and to gather information about sun exposure attitudes. Method: 2219 persons attended the campaign. Important data was collected: skin phenotype, degree of knowledge about skin cancer, sun exposure, and photoprotection measures. Total body examination was performed in 575 people. Results: Malignant lesions were observed in 37 people (6.4%) with an average age of 61 years old. 20 females (average age: 63 years old) and 17 males (average age: 59 years old). 70% of the people with lesions reported to have sun burns at least once in their life. We observed 60 lesions in 37 people. We suspected 11 Basal Cell Carcinomas, (18.3%), 4 malignant melanomas (6.6%), 44 actinic keratoses (73.3%), and 1 Bowen's disease (1.6%). Actinic keratosis and Basal Cell Carcinoma were the most frequent lesions (91.6%). 60% of lesions were found on the face, 33.3% of the facial lesions were located on the cheeks, 27.7% was located in the forehead and a 22,2% was located in the nose. Histopathological confirmation is awaited. Conclusion: Campaigns like this, may lead to an early detection of melanoma and non melanoma skin cancer, and increase public awareness regarding skin cancer.

30th CONGRESS OF THE INTERNATIONAL SOCIETY OF DERMATOPATHOLOGY - SANTIAGO, CHILE – 28 AL 31 OCTUBRE.

A CASE OF LEUKEMIA CUTIS.

Saavedra Tirza, Castrillón Adriana, Guerrero Silvia, Morales Claudia, Carreño Laura.

A 14-year-old female presented with a 4-month history of pigmented lesions with progressive growth, in the scalp, abdominal wall, and left breast. Physical examination revealed painless, firm, infiltrated yellowish gray papules, of 2–4 mm in diameter. Laboratory tests revealed anemia, leukopenia, and elevated VHS. Clinically, the diagnoses of xanthogranuloma or metastases were suggested. The histopathological study revealed diffuse and nodular dermal infiltrates of large cells with round, slightly irregular, hyperchromatic nuclei and few mitoses and pale, scarce, well-defined eosinophilic cytoplasm. Epidermotropism was not observed. Histochemical stains with toluidine blue and Giemsa showed no intracytoplasmic granules. Immunohistochemical staining for c-kit was negative. Myeloperoxidase staining was positive. The diagnosis of promyelocytic myeloid leukemia was made, and she was treated with 4 cycles of chemotherapy. After the first cycle, she showed a complete regression of the skin lesions and improvement of hematological parameters. She is currently asymptomatic. We present this case report for its interesting differential diagnosis and excellent response to systemic therapy.

INTERGLUTEAL MELANOMA. THE IMPORTANCE OF EXHAUSTIVE PHYSICAL EXAMINATION.

Tirza Saavedra, Jose Gatica, Alejandra Carmi, Claudia Morales.

We present the case of a 30-year-old female with a history of depression. She presented to us with a pruritic black lesion, which increased in size during the last year and was located on the superior intergluteal area. Physical examination revealed a 1.5-cm hyperpigmented black plaque with asymmetrical and irregular outlines. Dermatoscopy showed irregular pigment network with a prominent blue veil at the center. Anti-melanoma antibodies were positive 1/10, and lymphocyte subpopulations were normal. The skin biopsy showed melanoma, 1 mm in thickness, with negative lateral margins at 2 mm and negative lower surgical margin at 4 mm from the lesion. The present case highlights the importance of complete and thorough physical examination in every patient.

GRAFT VERSUS HOST DISEASE AFTER BLOOD TRANSFUSIONS: CASE REPORT.

Andrea Cortes, **Tirza Saavedra, Claudia Morales, Gabriela Strauch.**

Graft versus host disease is one of the major complications of allogenic bone marrow or stem cells transplantation but also can occur by nonirradiated blood products. The chronically late or sclerodermoid cutaneous involvement can affect both skin and mucous

membranes, and it is associated to high antinuclear antibody titles. We present the case of a female patient, 56 years old with a diagnosis of scleroderma made in 1992, treated with colchicine, penicillamine, and chloroquine. After using these drugs for 3 years, she developed autoimmune hepatitis and bone marrow suppression that required multiple blood transfusions, associated with bullous cutaneous lesions that affected the trunk, neck, and extremities, evolving to progressive cutaneous atrophy and slurring. After numerous treatments without success (methotrexate and steroids), the lesions progressed month to month. A new skin biopsy is taken, which reports fibrosing dermatitis with superficial and deep perivascular lymphocytic infiltrate, with atrophy of dermal appendages consistent with graft versus host disease in late stage. Laboratory examinations: antinuclear antibody 1/160 nucleolar pattern, native DNA antibody (2), ENA profile (2), IFD (2), and IFI (2). The case is discussed by the lower frequency of presentation.

NEUTROPHILIC DERMATOSIS SECONDARY TO MYELODYSPLASTIC SYNDROME WITH LEUKEMIA TRANSFORMATION.

Saavedra Tirza, Calderón Perla, Lefimil Juan, Guerrero Silvia, Weissbluth Marlene, **Carreño Laura, Morales Claudia.**

We present the case of a 55-year-old man with a history of 3 perianal abscesses and peritonsillar phlegmon 3 months ago. At admission, he had a 2-day history of erythematoviolaceous macules on trunk, legs, and right elbow with vesicles in addition on this place and a perianal fistula. He referred 10 kg loss of weight in 3 months with preserved appetite and asthenia. He was found feverish, with severe anemia, leukopenia, and reactive C protein 244. He was started on antibiotic treatment and general management. He was evaluated by a dermatologist who performed a biopsy from the elbow. A myelogram was performed by hematology, which showed a myelodysplastic syndrome with leukemic transformation. The skin biopsy showed a diffuse infiltrate of mature neutrophils and edema in the upper dermis, dilated small blood vessels. After the biopsy, right elbow evolves with ulceration, trunk and legs macules disappeared, and new plaque-like lesions appeared in the left forearm and neck. A new biopsy of the left forearm showed similar findings, but blasts could also be visualized in the dermis. We diagnosed neutrophilic dermatosis secondary to myelodysplastic syndrome with leukemia transformation.

ERYTHEMA INDURATUM OF BAZIN, UNUSUAL PRESENTATION ON SOLES.

Valenzuela Fernando, **Calderón Perla, Carreño Laura,** Hidalgo Marco, Carmi Alejandra, Schrag Beatriz, Correa Francisca.

We present a 17-years-old woman with a 2-month history of small, tender, and painful erythematoviolaceous nodules on the lower legs (anterior and posterior aspects) and soles. She received prednisone 30 mg/kg for 6 weeks as an erythema nodosum treatment, with no improvement. On physical examination, she presented cushingoid appearance and multiple 3–5 cm nodules on the lower extremities including the soles, with an ulcerated serohematic crust on the right ankle. Laboratory tests showed ESR. 60 mL/minute, antistreptolysin O negative and Mantoux test (PPD) of 19 mm. A skin biopsy showed a mixed septal and lobular granulomatous panniculitis with neutrophilic vasculitis. A Mycobacterium tuberculosis polymerase chain reaction was performed and was negative. Urine bacilloscopy was positive (2 of 6 samples), sputum bacilloscopy was negative, and thorax x-ray was normal. Erythema induratum of Bazin was diagnosed, and the patient was sent to pneumologist for complete workup and antituberculous therapy. Presentation on the soles has been rarely reported in the literature of this condition.

ORAL MALIGNANT MELANOMA IN SITU: A CASE REPORT.

Saavedra Tirza, Carreño Laura, González Carmen Gloria, Luna Andrea.

Oral melanoma is a rare tumor. It presents usually as a pigmented lesion with a rapid growth rate. The lack of treatment protocols and frequent delay in diagnosis makes its prognosis poor. We present the case of a 60-year-old Chilean male, heavy smoker, who presented a pigmented macular lesion of 6 months of evolution on the inner mucosa of the upper lip. On presentation, the clinical diagnosis of melanoma was made and confirmed by histopathology (evaluation of incisional biopsy). Microscopically, the tumor showed histopathologic features consistent with an in situ melanoma. The patient was referred to surgery, to complete wide resection with security margins and has remained disease free since then (last 12 months). Oral mucosal melanoma is rare and due to the rarity, any data on epidemiology, tumor behavior, treatment, follow-up, and survival are mainly based on single case reports. We present the case of an oral melanoma in situ successfully managed with surgery, to share the good outcomes obtained given an early detection and aggressive treatment.

DEPARTAMENTO DE OTORRINOLARINGOLOGÍA

XIX WORLD CONGRESS OF OTORHINOLARYNGOLOGY - SÃO PAULO, BRASIL – 1 AL 5 JUNIO.

PREVALENCIA Y FACTORES DE RIESGO DE PATOLOGÍA VOCAL.

Natalia Tamblay, **Christian Olavarría,** Juan Painepan, **Manuel Miranda.**

Introducción. Los profesores presentan el doble de disfonía que los no profesores. Los factores asociados a disfonía descritos en la literatura son entre otros: trabajo más de 24 horas semanales, género femenino, edad entre 40 y 59 años, 16 o más años de

profesión, historia familiar de trastornos vocales, reflujo gastro-esofágico, tabaquismo, etc. La instrucción vocal parece ser un factor protector de disfonía. Objetivos. * Estimar la prevalencia de patologías vocal, en la ciudad de Santiago. * Conocer la distribución de cada una de las patologías vocales en profesores. * Determinar los factores de riesgo y de protección, para la presencia de disfonía y de patología vocal. Material & metodo. Se validó la encuesta en forma autoaplicada en 30 profesores de educación básica y media. Se eligió en forma aleatoria 20 colegios, de educación básica y media. Se eligió 15 profesores al azar dentro de los colegios seleccionados. Los profesores llenarán la encuesta con: * Antecedentes demográficos * Antecedentes mórbidos * Índice de síntomas de reflujo faringeolaríngeo de Belafsky * Farmacos que recibe * Uso Vocal * Instrucción vocal. Un fonoaudiólogo realizará una evaluación audioperceptual de la voz, mediante el software de voz PRAAT. Se realizó una telarinoscopia o una nasofibroscopia, según corresponda. Aplicar la escala de Belafsky para determinar la severidad del reflujo. Caracterizar la muestra. Realizar una regresión logística univariada y una multivariada con las variables en estudio, se considerará significativo un p value < 0,05. Esta investigación, está aprobada por el comité de ética de este hospital y cuenta con los fondos concursables de la Sociedad Chilena de Otorrinolaringología. Resultados en proceso. Conclusión en proceso.

DEPARTAMENTO DE PSIQUIATRÍA Y SALUD MENTAL

WORLD FEDERATION OF BIOLOGICAL PSYCHIATRY - PARÍS, FRANCIA – 28 JUNIO A 2 JULIO.

IMMIGRATION IN CHILE: MENTAL HEALTH PROBLEMS. A COMPARISON BETWEEN IMMIGRANTS AND LOCAL POPULATION.

María Graciela Rojas, Manuel Fuentes, Ariel Castro, Pamela Torres, Viviana Guajardo, Berta Díaz, Rodrigo Sepúlveda, Ana Cortez, Rosemarie Fritsch.

Objective: People came to Chile, mostly, for increasing their salaries. The majority are Peruvian. Women work as housekeepers and men as laborer. They live in poor conditions, they have poor education and social support. In this study, we describe immigrants coming from Peru, Ecuador and Venezuela. The purpose of this study is to describe mental health problems (and risk/protective factors) suffered by immigrants in Santiago of Chile and compare them with similar studies on local population. Method: During November 2007, 282 immigrants aged 15 to 64 were contacted in a primary health care center in the most popular zone for immigrants in Santiago (Independencia). They were asked to answer a detailed structured questionnaire and we applied sociodemographic (Holemes and Rahe, Sarason, APGAR, etc), quality of life (EQ-5D), and mental health (MINI, CIS-R, GHQ-12) scales. Results: 282 persons (78.7% women and 21.3% men) were interviewed. The prevalence of mental health disorders was 14.2% (women 17.1 (12.4-22.7) / men 3.3 (0.4-11.5)). The most common diagnosis were affective and anxiety disorders (6,7%) The prevalence of mental disorders among immigrant population surveyed (14,2%) is lower than that described for non-immigrants who attended primary care centers (50%). This finding is consistent with similar published studies. Nonetheless, in children (second generation) prevalence and distribution of mental disorders is similar between immigrants and local population. Risk factors related with presence of mental health diseases are: Family disintegration, provisional residential status, overcrowding, hardworking, integration difficulties, and the absence of health insurance. Conclusion: On future studies, it will be interesting, to compare these kind of immigration (Latin American to Latin American country) to the phenomena occurring in Europe, in order to discuss of the influence of sociological factors on the epidemiology and treatment of mental health disorders.

XXII CONGRESS ISTH INTERNATIONAL SOCIETY THROMBOSIS AND HEMOSTASIS – BOSTON, USA – 11 AL 16 JULIO.

INCREASED LEVELS OF CIRCULATING ENDOTHELIAL CELLS IN PATIENTS WITH MAJOR DEPRESSION.

C. G. Sáez, J. Pereira, L. Risco, P. Olivares, O. Panes, **V. Araya, T. Galleguillos, T. Massardo, C. Liberman.**

Abstract: The association between depression and impaired endothelial function is thought to account for the high rates of morbidity and mortality due to cardiovascular disorders (CVD). This relationship seems to be independent of behavioral variables commonly present in these diseases. Evaluation of endothelial dysfunction in patients with depression may allow the detection of CVD at early stages and might be a helpful indicator for the evolution of the disease. The aim was to assess endothelial dysfunction by enumerating circulating endothelial cells (CEC) in patients with major depression (MD) before and after 8 weeks of serotonin uptake inhibitor therapy. We studied 13 DSM-IV unipolar depressive patients not recently treated (mean basal HAMD score of 24.7±4.9; range 19-34) and a group of age and gender matched non-depressive controls (n: 13). CEC were measured by capture with anti-CD146 antibody-coated-immunomagnetic beads, counterstained with anti-CD45 antibody, and quantified microscopically. The mean age of the patients was 45.5 years (range: 33-62 years) and 84.6% of them were women. CEC of patients were 431.7±148.6 cells/ml as compared to 119.1±42.06 cells/ml (p <0.0001) of the control group. After treatment, the HAMD scores improved: 8.41±8.2, range 1-31 (p <0.0001) along with the number of CEC: 347.5 ± 95.9 cells/mL (p <0.0298). Although CEC diminished after treatment, they remained significantly elevated compared to controls (347.5 ± 95.9 cells/mL; p <0.0001). Conclusions: Patients with MD present evidence of endothelial dysfunction which persist despite adequate treatment. These findings suggest that endothelial damage may explain the high rate of cardiovascular complications observed in these patients.

DEPARTAMENTO DE MEDICINA

UNIDAD DEL DOLOR

15th ANNUAL INTERNATIONAL CONGRESS INTERNATIONAL LIVER TRANSPLANTATION – NUEVA YORK, USA – 8 AL 11 JULIO.

SURVIVAL ANALYSIS AFTER LIVER TRANSPLANTATION IN CHILEAN PATIENTS RECEIVING CYCLOSPORINE OR TACROLIMUS AS PRIMARY IMMUNOSUPPRESSION.

Juan Pablo Miranda, Danny Oksenberg, Jaime Poniachik, Jorge Contreras, José Ibarra, Erwin Quijada, Rodrigo Rimasa, José Miguel Valera, Jorge Rojas, Gonzalo Cardemil, Guillermo Rencoret, Jaime Castillo, Juan Carlos Díaz.

Background: Cyclosporine or tacrolimus are widely used as primary immunosuppression to prevent rejection in liver transplant recipients. Both are calcineurin inhibitors but with different immunosuppression potency and some differences in their secondary effect profile. In Chilean liver transplantation patients, the implications of these differences are not assessed. Aim: We evaluated results and survival from a prospective trial that compared cyclosporine microemulsion (CsA-me) and Tacrolimus (Tac) for primary immunosuppression. Methods: From July 2002 to December 2007, 86 liver transplantation from cadaveric donors were performed in the Hospital Clínico Universidad de Chile. Sixty three (73,3%) received CsA-me or generic tacrolimus (T-Inmun®) as primary immunosuppression. We studied demographic and clinical variables. Statistical analysis was performed with Stata 10.0. Results: Fifty three (82,8%) received CsA-me and 11 (17,2%) received Tac. Median age was 53,5 years. Causes for transplantation in CsA-me group were HCV 24,5%; alcoholic cirrhosis 17%; NASH 15,1%; cryptogenic cirrhosis 11,3%; other 32,1% and in the Tac group: autoimmune hepatitis 27,3%; HCV 18,2%; alcoholic cirrhosis 18,2%; NASH 18,2%; other 18,2% (p=ns by group). Patient Survival analysis of group CsA-me at six months, 1 year and 5 year were respectively 86,8%, 84,9% and 77,4%, and on group Tac were 100%, 100% and 90,9% respectively (log rank p<0.0001). Differences were not seen with respect to infections (50,9 v/s 54,6%), acute kidney failure (39,6 v/s 27,3%), de-novo insulin-requiring diabetes mellitus (18,4 v/s 11,8%) and graft rejections (24,5 v/s 27,2%). Conclusion: In the Chilean population Tacrolimus has demonstrated to be as effective as Cyclosporine in improved patient survival. Tacrolimus seems to be a more appropriate drug to be used for primary immunosuppression in liver transplantation.

EARLY COMPLICATIONS IN LIVER TRANSPLANT PATIENTS TREATED WITH TACROLIMUS OR CYCLOSPORINE.

Juan Pablo Miranda, Jaime Poniachik, Danny Oksenberg, Jorge Contreras, José Ibarra, Rodrigo Rimasa, Erwin Quijada, José Miguel Valera, Jorge Rojas, Gonzalo Cardemil, Guillermo Rencoret, Jaime Castillo, Juan Carlos Díaz.

Objective: To compare the incidence of medical and surgical complications, acute cellular rejection and mortality in OLT patients, treated with tacrolimus versus cyclosporine, at a 3-month post-transplant period. Method: Descriptive study, from 2005-2007. Eighteen OLT patients receiving an immunosuppressive regimen, either bi or tri-associated with generic tacrolimus (T-Inmun®), mycophenolate mofetil and/or steroids, and 18 patients with cyclosporine, mycophenolate mofetil and/or steroids, were randomly selected. Demographic, clinical complications and mortality features were analyzed over three initial post-transplant months. Analysis was performed in stata 10.0. Results: The sample comprised 36 liver transplants in 34 patients, average age 48.4±13.5 (21-66) years, 15 male (44.1%) and 19 female (55.9%). Patients were distributed into 2 groups: Cyclosporine (C) and Tacrolimus (T). Average age T=45.8±14.5 (21-66) and C=51±12.3 (25-66) years p=ns per group. Transplant etiology: 7 (19.4%) alcoholic hepatic cirrhosis, 7 (19.4%) hepatic cirrhosis due to HCV, 4 (11.1%) autoimmune hepatic cirrhosis and 4 (11.1%) nonalcoholic steatohepatitis hepatic cirrhosis, p=ns per group. Group C received a cyclosporine dose of 15 mg/kg/day, divided into two oral doses every 12 h, with dose adjustments based on C2 plasma levels between 800-1200 ng/ml. Group T received a Tacrolimus dose of 0,05 to 0,15 mg/kg/day, divided into two oral doses every 12 h, and adjusting doses in order to maintain T trough plasma levels between 10-15 ng/ml, over the three initial post-transplant months. Each group also received steroids with or without mycophenolate mofetil. Complications: 4 patients (22.2%) showed acute cellular rejection in group C v/s 1 (5.5%) in group T p<0.015. Eight patients (33.3%) showed infections in group C v/s 2 (11.1%) in group T p=ns; there were no differences in the medical and surgical complications and in the hospitalization periods between groups. Two patients required retransplant, 1 (5.5%) from each group, p=ns. Two (11.1%) deaths were reported in group C v/s 0 in group T, p=0.04, due to infectious complications. Conclusions: T shows a significantly lower incidence of acute cellular rejection and mortality than C over the 3 initial post-transplant months.

INMUNOLOGÍA

IAS CONGRESS (INTERNATIONAL AIDS SOCIETY) – CAPE TOWN, SUDÁFRICA- 19 AL 22 JULIO.

HIGH RATES OF RESISTANCE TO ANTIRETROVIRALS (ARV) AFTER FIRST LINE HAART FAILURE IN A DEVELOPING-COUNTRY - RESULTS OF THE CHILEAN AIDS COHORT (CHIAIC).

C. Beltrán, **A. Afani**, M. Contreras, M.E. Pereira, M. Wolff, O. Morales, **W. Acevedo**, P. Vásquez, J.M. Arancibia, D. Gallardo, Chilean AIDS Cohort - Universidad de Chile.

Background: New drugs or families of ARV are often needed after HAART failure. This can be a major challenge in resource constrained countries with limited access to expensive ARV. Chile is a middle-income country with expanded access to

HAART since 2001. The aim of the study is to identify major resistance mutations (MRM) selected for by different first line regimens and therapeutic options after failure in a resource constrained setting. Methods: In 29/33 AIDS care centers, 7,007/8,192 patients on treatment nationwide are prospectively followed up by the ChiAC Study Group. Patients failing HAART had genotype testing in 1 central laboratory (TrugeneR HIV-1 Bayer). MRM for NRTI, NNRTI and PI were classified according to the IAS-USA panel 2008. Statistical analysis by chi2 test with Yates correction. Results: Among 5,120 patients on first HAART (18,177 patients/year follow up), 473 had genotype for virological failure, 224 of them after first failure (180/4,184 patients on NNRTI, 44/665 on PI containing HAART). Only 9.8% of failures had no MRM (7.8% NNRTI - 44.4% boosted PI group, $p < 0.05$). In 20.1% of failures we found resistance to 1 family and in 67.9% 2 class resistance (72.2% NNRTI - 22.2% boosted PI group $p = NS$). 2.2% developed triple class resistance after first failure. Only 10 cases (5.6% of NNRTI patients) had ≥ 3 MRM to Etravirine and 1 case ≥ 3 MRM to Darunavir. Conclusions: In this population-based study from a developing country, we found a very high rate of resistance after first failure (88.0% MRM to 1 or 2 classes), less extensive with boosted PI, and very few cases of triple class MRM consistent with low primary resistance rates. Own class resistance is particularly common in NNRTI failing regimens (60%) with cross resistance to Etravirine in only 5.6%. New ARV should be available in resource constrained countries.

9th ANNUAL MEETING, FEDERATION OF CLINICAL IMMUNOLOGY SOCIETIES – SAN FRANCISCO, USA – 11 AL 14 JUNIO.

DEXAMETHASONE TREATED MONOCYTE-DENDRITIC CELLS FROM LATEX ALLERGY PATIENTS INDUCE TOLERANCE TO THE MAJOR ALLERGEN HEV B 5.

Alejandro Escobar, **María Antonieta Guzmán** and Juan Aguillón.

Natural rubber latex allergy is a significant problem both for health care workers and for children with complex medical and surgical conditions that require multiple surgical interventions. Current subcutaneous and sublingual immunotherapy schedules have been tested for treatment of latex allergy with evidence of efficacy but the risks of adverse events are high. To day the immunotherapeutical use of tolerogenic dendritic cells has been explored in preclinical and animal models studies to autoimmune and allergic diseases. In this work, we demonstrated that monocyte derived dendritic cells treated with dexamethasone from latex allergy patients differentiate into a subset of tolerogenic dendritic cells, characterized by low expression of MHC class II, CD40, CD83, CD80 and CD86 molecules, high endocytosis capability, IL-12 low / IL-10 high cytokine profile and low alloantigen proliferation potential. Furthermore, dexamethasone treated dendritic cells were able to inhibit both specific proliferation of Hev b 5 latex specific T-cell lines and the production of Hev b 5 specific IgE antibodies. This work provides in vitro data for an innovative immunomodulatory approach that may be soon translated to the clinic for latex sensitised or allergic subjects.

MEDICINA NUCLEAR

XXII CONGRESS ISTH INTERNATIONAL SOCIETETY THROMBOSIS AND HEMOSTASIS – BOSTON, USA – 11 AL 16 JULIO.

ACTIVATION OF THE HEMOSTATIC SYSTEM AND ENDOTHELIAL DYSFUNCTION IN CHRONIC COCAINE CONSUMERS: ASSOCIATION WITH BRAIN PERFUSION DEFECTS.

J. Pereira, C. G. Sáez, P. Olivares, N. Moreno, M. J. Cabrera, O. Panes, P. Hidalgo, **T. Massardo**, **J. Pallavicini**, R. Jaimovich, J. C. Quintana, D. Mezzano.

Cocaine use is a known risk factor for vascular complications affecting both cardiac and cerebral territories including brain perfusion defects (BPD). Although their pathogenesis is not fully understood, premature atherosclerosis and platelets thrombi have been found. Aim: to demonstrate activation of the haemostatic system and endothelial dysfunction (ED) in cocaine consumers and their relationship with BPD. Methods: We studied 23 DSM-IV cocaine dependent: 19 males, (mean age 32 years). Homeostasis activation assessment included: thrombin-antithrombin complexes (TAT), NAP-2 and RANTES for platelet activation and circulating endothelial cells (CECs) and sICAM for ED. These values were compared with sex and age matched controls. Brain SPECT with ^{99m}Tc-ethylencistein-dimer was performed a week after in-hospital abstinence. Results: TAT in patients and controls were 2.7 ± 0.7 and 0.7 ± 0.4 g/L, respectively ($p = 0.06$). CECs were significantly elevated among cocaine users (632 ± 281 vs 67 ± 54 cells/mL; $p < 0.0001$). Plasma levels of sICAM-1 were significantly increased in cocaine-dependents (360 ± 92 ng/mL vs 261 ± 34 , respectively; $p < 0.01$). NAP-2 (129 ± 8.4 ng/mL) and RANTES (4.01 ± 2.12 ng/mL) level were increased as well in cocaine-dependents compared to controls (87.1 ± 8.6 and 2.12 ± 0.35 , respectively; $p < 0.01$). All patients presented focal bilateral perfusion baseline abnormalities ($< 66\%$ of the maximal) mainly in limbic and fronto temporal areas. sICAM and TAT were correlated with cortical hypoperfusion ($r: 0.46$ and 0.50 , respectively; $p < 0.05$); RANTES showed the strongest correlation with BPD ($r: 0.55$; $p: 0.007$). Conclusions: Chronic cocaine consumers show evidence of hemostasis activation and endothelial dysfunction associated with BPD. The relationship between high levels of RANTES and cortical perfusion defects support the notion that in cocaine-induced ischemic complications, atherothrombosis may play an important role.

PLASMA FROM CHRONIC COCAINE CONSUMERS INDUCES ACTIVATION OF ENDOTHELIAL CELLS.

C. G. Sáez, P. Olivares, P. Hidalgo, S. Belmont, D. Mezzano, **T. Massardo, J. Pallavicini, J. Pereira.**

Cocaine consumption is associated with a high risk of vascular ischemic disease. The premature atherosclerotic lesions and platelets thrombi seen in chronic cocaine abusers, in the absence of classical risk factors, may be the result of a sustained activation of blood cells and vascular endothelium. Persistent stimulation of endothelial cells will abrogate its normal anti-coagulant function thus expressing pro-coagulant factors and enhancing its adhesive properties. The aim of this study was to investigate the effect of plasma from chronic cocaine consumers on normal endothelial cells. Methods: HUVEC were supplemented with 20% of complete (cP) or microparticle free plasma (fP) of cocaine consumers or healthy controls. After 48h, the media were analyzed for von Willebrand factor (vWf) and the cells were immunostained for tissue factor (TF) and vWf. Static platelet adhesion to HUVEC was evaluated by microscopy. Results: The cP from cocaine consumers (n=18) induced a significantly higher vWf release compare to HUVEC treated with cP from control group (5.64 ± 4.0 vs 1.4 ± 0.8 UI/dL; $p \leq 0.001$). Removal of MPs diminished vWf release in HUVEC treated with consumer's plasma but, although not significant, was still higher than the control fP (2.73 ± 1.6 vs 1.97 ± 1.0 UI/dL; $p \leq 0.44$). HUVEC cultured with consumer's plasma showed a stronger vWf and TF staining and adheres a significantly higher number of platelets than those cells supplemented with control's plasma. Conclusion: Cultured endothelial cells exposed to plasma from cocaine consumers showed changes characteristic of a prothrombotic phenotype. These findings support the notion that activation and/or damage of the endothelium may play a role in the pathogenesis of cocaine-induced vascular complications.

IAEA BOOK OF EXTENDED SYNOPSIS INTERNATIONAL CONFERENCE ON ADVANCES IN RADIATION ONCOLOGY ICARO – VIENA, AUSTRIA – 27 AL 29 ABRIL.

RADIOISOTOPIC THERAPY FOR NEUROENDOCRINE TUMORS WITH LABELED-SOMATOSTATIN ANALOGUES IN TWO CHILEAN HOSPITALS.

José Canessa, **Teresa Massardo, J. Miguel Illauzpe, Pedro Pineda, María Cecilia Gil.**

Introduction Neuroendocrine malignancies usually present a high degree of difficulties with conventional therapies, mainly if they are disseminated, because they are poor responders to chemo and radiotherapy, even though they are considered as slow growth neoplasm. Most of them express specific receptors for amines and peptides, as somatostatin receptors. Tumors with superficial somatostatin receptors could be treated specifically with their analogues labeled with beta emitters. We have available in the country, therapy with dotatoc /dotatate with 90Y since 2004 and lately with 188Lu. Objective: to evaluate our initial experience with this newly acquired therapeutic approach performed to 17 patients in 2 institutions (76% at DIPRECA Hospital). Material and method. Population: They corresponded to 65% males; ranging between 29 to 74 y.o. (mean: 53 ± 12). All have metastatic disease. The histological diagnosis was mostly carcinoid and then medullary thyroid cancer. The patients were all submitted to surgery in their primary location and to chemotherapy, radiotherapy and/or Sandostatin® priorly; this latter medication was withdraw before isotopic diagnosis and therapies. All patients should have a) normal renal and hematological profile prior therapy and b) initial positive diagnostic test with 111In-dotatate/dotatoc, Octreoscan® or 68Ga-dotatate. 90Y was used in 90% of the cases, labeled locally, with dotatoc or dotatate as available. 177Lu was selected recently in cases with smaller lesions. The protocol included in-hospital renal protection with hydration using amino-acids infusion pre, during and post beta therapy as well. Steroids and antiemetics were also included. In all patients we acquired bremsstrahlung images for in vivo quality control. Anatomical imaging was performed for follow-up. Results. The patients received sequential therapy ranging between 1 to 7 doses, with a mean of 3.2 ± 1.6 doses/each. The total mean dose varied between 100-375 mCi at University of Chile and between 75-525 mCi at DIPRECA; the follow-up ranged from 0.4 to 44 months. Two/17 patients recently entered in the protocol. Lesion size remain stable in 6/17 cases, progression was observed in 5/17 and 3 patients died during the follow-up. One patient presented renal chronic failure post his 3rd dose. A transient delayed hypokalemia was observed in another. No hematological complications nor severe count cell depression were observed as other adverse effects. Symptoms did not change significantly in carcinoid cases but a lesser mass effect was observed post therapy in mediastinal and abdominal lesions. Conclusions: Neuroendocrine therapy with labeled somatostatin analogues is safe and diminishes disease progression. The protocol should be performed within a multidisciplinary team to obtain maximal benefits for the patients.

56th ANNUAL MEETING SOCIETY OF NUCLEAR MEDICINE – TORONTO, CANADÁ – 5 AL 9 JUNIO.

BRAIN PERFUSION DEFECTS ARE ASSOCIATED WITH ENDOTHELIAL DYSFUNCTION IN COCAINE USERS.

Teresa Massardo, Julio Pallavicini, Juan Carlos Quintana, Rodrigo Jaimovich, Claudia Sáez, Paulina Olivares, Diego Mezzano, Rita Alay and Jaime Pereira.

Objectives: Chronic cocaine consumption induces cortical brain perfusion defects. Vasospasm appears to play a role associated with haemostatic system activation. Endothelial dysfunction (ED), which is involved in vascular damage, is reliably assessed by circulating endothelial cells (CEC). Goal: Investigate ED evidence in patients with recent demonstrated cocaine consumption. Methods: We studied 15 DSM-IV cocaine dependent patients; 12 male; mean age 31 ± 9 y.o. Basal brain perfusion SPECT with 99mTc-ethylencistein-dimer performed a week after admittance; 13 of them controlled after 4 weeks of strict abstinence. Statistical

Parametric Map and Neurostat were used to evaluate hypoperfusion (<66% maximal cortical activity). Whole blood CEC levels were also enumerated. Results: All patients presented focal bilateral perfusion baseline abnormalities, mainly in limbic and fronto temporal areas without significant change after abstinence. CEC were increased at baseline (636±208 cells/ml) and after abstinence (464±172 cells/ml), (p<0.0001 in both) with a significant reduction (p:0.0027). Initial brain hypoperfusion correlated better with CEC levels after a month of abstinence: Global Brain r=0.7694, Global Cortex r=0.7695, Prefrontal r=0.8427 and Cingulate r=0.6365. Conclusions: Cocaine dependent patients had persistent brain hypoperfusion associated to ED after abstinence. These findings support the notion that cocaine-induced endothelial damage may play a pathogenic role in the ischemic vascular damage observed in chronic cocaine users.

ENDOCRINOLOGÍA

91ST ENDOCRINE SOCIETY MEETING ENDO 09 - WASHINGTON, USA – 10 AL 13 JUNIO.

EXPRESSION OF MOLECULAR MARKERS IN PAPILLARY THYROID CARCINOMA AND ASSOCIATION WITH NODAL METASTASES.

P Pineda, V Tapia, C Fernández, P Cabané, P Gac, A Lanas.

Papillary cancer is the most prevalent thyroid malignant neoplasia. There are many prognostic factors to determine survival or recurrence. Nodal involvement in thyroid cancer can change therapeutic approach, but in many cases, lymphadenopathies appear late in follow-up. Early detection of molecular markers that can predict nodal metastatic spread at the time of first surgery could improve the management of these patients. NIS, c-MET, TIMP1 and EphrinB2 have been associated with thyroid cancer in literature but their role in tumor progression is unclear. 42 thyroid papillary cancer specimens were studied with previously obtained informed consent from 42 patients. 24 with nodal metastases and 18 without were included. Detection of mRNA expression was studied with RT-PCR using specific primers for markers cMET, TIMP1 and EphrinB2 and UNSCAN-IT program was used for semiquantitative analysis. Immunohistochemistry was also used to examine paraffin-embedded tissue tumor sections for detection of these markers using specific antibodies. Staining intensity and intracellular localization were blind evaluated by an experienced pathologist in a standardized scale. RT-PCR showed no statistical differences comparing mRNA expression of markers in samples with or without metastases, but a trend to an increased expression in metastatic tumors was observed.

NEFROLOGÍA

MUNDIAL CONGRESS INTERNATIONAL SOCIETY OF NEFROLOGY – MILÁN, ITALIA- 22 AL 26 MAYO.

SPIRONOLACTONE BLOCKS THE INCREASE IN TNF-A, IL-6 AND TGF-B1 MRNAS, INDUCED BY ALDOSTERONE IN HUMAN PERITONEAL MESOTHELIAL CELLS, EXPOSED TO GLUCOSE-BASED HYPERTONIC SOLUTIONS.

Rubén J. Torres, Ana Luisa Eguiguren, Magdalena González, Miriam Alvo, Luis Michea, Alejandro Pacheco, Andrés Stutzin.

Introduction and aims: Peritoneal dialysis (PD) has been used as a long-term renal replacement therapy, however after chronic exposure of the peritoneum to glucose-based peritoneal dialysis fluids, there is a progressive deposition of extracellular matrix (ECM) and neovascularization, leading to peritoneal fibrosis and ultrafiltration failure. Peritoneal mesothelial cells (PMCs), play an active role in this process suffering an epithelial mesenchymal transition that increases secretion of ECM and various cytokines involved in the pathogenesis of peritoneal fibrosis. It is known that an inadequate activity of the renin-angiotensin-aldosterone system promotes fibrosis in various tissues. In an attempt to slow peritoneal fibrosis, angiotensin-II blocking has been explored with promising results. However, the effect that aldosterone might have on peritoneal inflammation and fibrosis has not been studied so far. In this work we have determined whether human PMCs normally express mineralocorticoid receptors and whether aldosterone promotes the expression of inflammatory and pro-fibrotic mediators, that could be blocked by spironolactone. Methods: Primary cultures of human PMC were obtained from the effluent of peritoneal fluid from 7 young patients initiating PD technique (35-7 years old, less than 3 months in PD), not diabetic, and without inflammatory or systemic diseases. All the cultures showed typical cobblestone epithelium, and pancytoqueratin expression. Using real time RT-PCR technique we first measured mRNA of mineralocorticoid receptor. Then SGK1, TNF-a, IL6 and TGF-b1 mRNAs were measured in cells exposed for 24 hours to isotonic solution (300 mOsm/kgH₂O) or hypertonic glucose based solution (395 mOsm/kgH₂O), in the presence or absence of aldosterone 10⁻⁹ M and spironolactone 10⁻⁶ M. Results: A basal constitutive expression of mineralocorticoid receptors in these cells was demonstrated. In isotonic medium mRNA abundance of SGK1, an early response gene to aldosterone, as well as mediators of inflammation-fibrosis (TNF-a, IL6 and TGF-b1) increased significantly in the presence of aldosterone (n = 7 p <0.02, n = 5 p <0.02, n = 4 p <0.05, n = 4 p <0.05, respectively). Under glucose-based hypertonic solution, aldosterone also increased significantly these transcripts, an effect that could be prevented significantly by spironolactone (n = 4 p <0.05 in each experiment). Conclusions: Mesothelial cells express the mineralocorticoid receptors which are effectively targeted by aldosterone. Under condition of hypertonic glucose exposure, aldosterone increased mRNA for inflammatory and fibrosis mediators, an effect that can be reversed with spironolactone. These results suggest that the administration of spironolactone in patients on chronic peritoneal dialysis could prevent the deterioration of the peritoneal membrane.

EVOLUTION AND PROGNOSIS OF PREGNANCY IN CHRONIC HAEMODIALYSIS. SEVEN YEARS OF EXPERIENCE.

Maria Eugenia Sanhueza, Carla Estremadoyro, **Alejandro Pacheco**, **Miriam Alvo**, **Leticia Elgueta**, **Rubén Torres**, Pedro Sfeir.

Introduction and aims: Pregnancy is a rare condition among young women with end stage renal disease in dialysis. Most of these patients have anovulatory menstrual cycles, amenorrhoea, and are considered infertile. Dialysis is associated with an increased risk of premature birth or abortions, neonatal death, pre-eclampsia and intrauterine growth retardation. Considering the unusual and highly risky medical condition that represents pregnancy in dialysis, we decided to analyze the experience gained in this condition at a national university nephrology centre. **Methods:** All cases of pregnancy in dialysis occurred in the last 7 years in a university ambulatory chronic dialysis unit were analyzed retrospectively, extracting information from the clinical database. The study took into account the period prior to pregnancy, pregnancy, childbirth and newborn data (when it was possible). The results were expressed as average standard deviation. **Results:** Between May 2001 and May 2008, 10 patients in chronic haemodialysis became pregnant, with a median age of 29.2 5.0 years. Of these, only one regularly used some contraceptive method. The patients studied, three initiated chronic dialysis during the first half of pregnancy, while seven patients were already in a regular chronic haemodialysis program, with a pre pregnant time in dialysis of 20.7 months (3 to 71 months). Three times a week, 4 to 3.5 hours each time, with a Kt/V weekly was 3,8 0,5 three months before pregnancy. All the patients increased the dose of dialysis in a progressive manner during pregnancy, up to 24 hours weekly, with a Kt/V weekly of 7.9 1.7. Five had diuresis greater of 1,000 mL per day. Considering the whole group of patients, at the beginning of pregnancy they had a serum albumin of 3.64 mg/dL 0.48, hematocrit of 30.2 % 5.28, parathyroid hormone (PTH) was 375.2 171.6 pg/mL. Systolic blood pressure at the time of pregnancy was 136.1 18.8 mm Hg and diastolic 75.5 9.1 mm Hg. At the end of pregnancy, systolic blood pressure was 143.9 23.6 mm Hg and diastolic 87.7 14.2 mm, plasma albumin was 3.8 mg/dL 0.5 and hematocrit 28.2% 4.7. All patients required treatment with iron and erythropoietin. All patients experienced significant complications during their pregnancies: pre-eclampsia was the most frequent, appearing in 4 of 10 patients. All pregnancies ended prematurely on average at 30.1 5.7 weeks. 7 of 10 patients had living infants, weighing 1,690 grs 618.8. Three patients had stillbirths. **Conclusions:** In our experience, pregnancy in dialysis occurred in women with less than two years in dialysis, with significant residual diuresis and young and well nourished patients, with an adequate dose of dialysis. The course of pregnancy in these patients generally was torpid despite efforts to deliver a higher dose of dialysis and preserve acceptable values of hematocrit and albumin. The patients had a high proportion of obstetric complications (especially hypertension) and neonatal problems (stillbirths and low birthweight).

RESPIRATORIO

BRITISH THORACIC SOCIETY WINTER MEETING – LONDRES, INGLATERRA – 16 AL 20 MAYO.

QUADRICEPS ENDURANCE IS REDUCED IN FIBROTIC IDIOPATHIC INTERSTITIAL PNEUMONIA.

L Mendoza, A Gogali, D Shrikishna, SV Kemp, AS Jackson, ZF Shaikh, MI Polkey, AU Wells, NS Hopkinson.

Background Fibrotic idiopathic interstitial pneumonia is characterized by exertional dyspnoea and reduced exercise capacity, both attributed to pulmonary function deterioration. Little is known about the role of reduced peripheral skeletal muscle function as a factor in exercise capacity in this condition. **Aims** To determine the presence of reduced quadriceps strength and/or endurance and its relationship to exercise capacity in patients with fibrotic idiopathic interstitial pneumonia. **Methods** We studied 25 patients with fibrotic idiopathic interstitial pneumonia, forced vital capacity (FVC) mean (SD) 78.7 (14.0) % predicted, TLCO mean (SD) 40.3 (10.9) % predicted, and 25 age-matched healthy controls. We measured fat-free mass, respiratory muscle strength, voluntary quadriceps strength (QMVC), twitch quadriceps force (TwQ) and quadriceps endurance with a protocol consisting of repetitive magnetic stimulation of the quadriceps using a special coil with 60 trains (2 s on, 3 s off) over 5 min. The 6 minute walking test (6MWT) was measured as an indicator of exercise capacity. **Results** Both groups had comparable fat-free mass. There were no significant differences between patients and controls in respiratory muscle function (sniff nasal inspiratory pressure (SNIP), maximum inspiratory pressure (MIP) and maximum expiratory pressure (MEP)) and quadriceps strength measurements (QMVC mean (SD) 75.3 (18.3) vs 78.1 (16.5) % predicted and TwQ 8.0 (2.4) kg vs 9.8 (3.3) kg, patients vs controls). However, the force decline of the quadriceps during the endurance protocol was significantly greater in patients (fig 1). There was a significant difference in the 6MWD (489 (88.8) m vs 616 (74.6) m, patients vs controls, p,0.0001). The time to fall to 70% of baseline force (T70%) in the endurance protocol correlated significantly with the 6MWD in controls (r2=0.35 p=0.016) but not in patients. In a stepwise multiple regression analysis, basal PaO2 was the only significant predictor of the 6MWD in patients (r2=0.2 p=0.022). **Conclusion** Fibrotic idiopathic interstitial pneumonia significantly affects quadriceps endurance.

OFICINA DE APOYO A LA INVESTIGACIÓN OAIC

CONGRESS OF SOCIETY FOR NEUROSCIENCE 2009 – CHICAGO, USA – 7 AL 21 OCTUBRE.

ACCURACY AND RESPONSE TIMES INTERACTIONS IN 2 VERSIONS OF THE WEATHER PREDICTION TASK.

C A. Delgado, C. Manterola, P. H. Délano, M. L. Aylwin.

Abstract: Implicit memory system refers to learning of complex information without awareness or intention, it occurs after repetitive training. The probabilistic category learning task: “weather prediction task (WPT)” has been extensively used to demonstrate implicit memory learning, where a set of cues are associated to a weather output. Participants receive a probabilistic feedback after each response. The probabilistic nature of the task prevents attempts to memorize a solution (Knowlton 1994). But it has been proposed that learning strategies in normal subjects are mainly based on the cards with strong cueoutcome association (COA) (Lagnado 2006), favoring the use of declarative memory. In attempt to examine if WPT learning involves implicit or explicit memory we have tested two different versions of WPT, with different cue probabilities and outcome association: Version 1: strong COA using the same probabilities of Knowlton (1994). Version 2: lower COA using the same parameters of Klimkowicz (2008). Twenty healthy participants between 20-35 years performed each version of the task, completing 200 trials. After every 50 trials they were asked to score the COA in a visual panel. Accuracy, response times (RT) and differences between the two versions of the task were analyzed using ANOVA. We found that accuracy improved significantly from the first to the third block of 50 trials for Version1 only. RT decreased significantly from the first to the third block of 50 trials for Version 2 only, and accuracy was negative correlated to RT. Single cue analysis showed significant better performance for strong cards in both versions of the task, being explicit classification of them significantly better than for other cards. Version 1 is probably more related with explicit memory than Version 2, RT-accuracy interaction might be related with implicit memory.

UNIDAD DE PACIENTES CRÍTICOS

38th CRITICAL CARE CONGRESS - NASHVILLE TENNESSE, USA – 31 ENERO AL 4 FEBRERO.

OPTIMIZATION OF THE AMIKACIN ADMINISTRATION IN CRITICALLY ILL PATIENTS GUIDED BY PHARMACOKINETICS PARAMETERS.

R. Gálvez, E. Tobar, R. Cornejo, C. Romero, O. Llanos, J. Castro.

Introduction: In critically ill patients suitable use of antibiotic schemes improve the outcome of the severe sepsis and septic shock, but pharmacokinetics' properties are altered. Amikacin (AMK) is an option for the treatment of community acquired and healthcare associated infections from gram-negative. AMK standard doses have been suggested could be insufficient in those patients. Hypothesis: Our aim is to evaluate the use of AMK to obtain the suggested goals of maximum plasmatic levels, evaluating them and safety. Methods: 99 critically ill patients in severe sepsis of septic shock were included in three groups in consecutive form, receiving daily 15 mg/k(Group I), 25 mg/k(Group II) and 30 mg/k(Group III) in 30 min iv infusion. Plasmatic concentration-1 hour post administration (Cmax) was determined by FPIA. Renal function data were follow up to evaluate toxicity. We used SPSS 12.0 comparing values of the continuous variables using bilateral T-test (p<0.05) Results: For groups I, II and III respectively results are: APACHE II 25+5, 22+5, 23+9, SOFA 11+3, 10+3 and 10+4(ns). Volume of distribution was 0.39+0.21; 0.44+0.08 and 0.45+0.18 l/k(ns). AMK Cmax was 35.2+9.4; 57.4+9.8 and 72.1+18.4 mcg/ml (p<0.001 between groups II and III respect to I; p<0.01 between groups II and III). Cmax over 60 mcg/ml in 0%(Group I), 39%(Group II) and 76% in Group III (p<0.001). Renal function to 28 days is similar between groups (Clearance 56.4+18.4; 95.6+47.4 and 89.7+26.6 ml/min respectively.ns) Conclusions: Administration of AMK in daily dose of 30 mg/k is associated to Cmax significantly greater than other two studied groups, with a greater proportion of patients than they reach the recommended plasmatic levels. The raised increase of dose did not demonstrate greater toxicity to renal level, followed with clearance of creatinine to day-28. It was demonstrated that AMK traditional doses, 15 mg/k/day, are insufficient to arrive at Cmax suggested in critically ill patients.

22nd ANNUAL CONGRESS OF THE EUROPEAN SOCIETY OF INTENSIVE CARE MEDICINE – VIENNA, AUSTRIA – 11 AL 14 OCTUBRE.

CAM-ICU VALIDATION AND ADAPTATION'S PROCESS FOR SPANISH SPEAKING POPULATION IN SOUTH AMERICA.

E. Tobar, C. Romero, R. Cornejo, M. Lira, L. De la Barrera.

Introduction: Delirium is prevalent in critically ill patients. No instruments have been validated and shown reliable to date in Spanish speaking population. Hypothesis: To develop a culturally adapted translation and to validate a Spanish (Chilean) version of CAM-ICU and demonstrate validity and reliability. Methods: A Spanish CAM-ICU version was design according to recommendations. This was applied by two observers and compared with DSM-IV applied by psychiatrists. Adaptation's process was as follows. Preparation: We contact original authors, who gave us authorization and expert advice. Translation: We used original CAM-ICU Spanish version and developed our own Spanish translation. Reconciliation: We formed a “local” expert team including psyq, geriatrician, ICU physicians and nurses with experience in delirium. Doubts generated were discussed and solved with Ely. Preliminary version was back-translated to English

by two English native speakers. Spanish and English CAM-ICU versions were contrasted for discordances, generating a definitive Spanish CAM-ICU .Pilot: We applied CAM-ICU to 8 patients (15 evaluations), and asked about comprehension to 10 ICU clinical nurses. Results: We performed 65 evaluations in 29 patients [age 64±16, male 45%, APACHE II 17(14-25), SOFA 8(7-9)]. Interrater reliability: Agreement 95.4%, Kappa 0.91; CAM-ICU versus DSM-IV for Observer A was: Sensitivity 80%, Specificity 96%, PPV 97%, NPV 75%, Accuracy 86% and for Observer B was 83%, 96%, 97%, 77%, and 88%, respectively. Cronbach's alpha was 0.84. Conclusions: The Spanish version of CAM-ICU shows excellent reliability and validity compared with DSM IV criteria for diagnosis of delirium.

COMPARISON OF POTENTIALLY RECRUITABLE LUNG (PRL) IN SUPINE VERSUS PRONE POSITION. PRELIMINARY DATA.

R. Cornejo, J.C. Díaz, C. Repetto, P. Suárez, D. Arellano, K. Rouliez, G. Díaz, C. Romero, E. Mezzano, A.B. Riquelme, C. Ramos.

Introduction. In ALI/ARDS patients, the percentage of potentially recruitable lung is highly variable. Considering the proposed pathophysiological mechanisms by which prone position (PP) improves oxygenation, and its probable protective effect on mechanical ventilation, we thought that PRL from patients with early ARDS may be higher when it is measured in PP. Similarly, the response to PEEP could be better in prone, reflecting an improvement in the distribution of the different compartments in the ARDS lung, obtaining better aeration without unnecessary exposure to increased stress and strain. The aim of this study was to compare the PRL, as well as the changes in the distribution of lung compartments in supine versus prone, according to density detected by CT. **Methods.** 9 ARDS patients with < 72 hrs of MV and PaO₂/FiO₂ persistently below 200, underwent whole-lung CT during breath-holding sessions at consecutive airway pressures of 5, 45, and 15 cm H₂O, in both supine and prone position (position was applied in random order). All patients were sedated and paralyzed. The percentage of potentially recruitable lung was defined as previously described Gattinoni *et al* (ref), Non aerated tissue (NAT) at 5 - NAT at 45 cmH₂O)/total weigh. A recruitment maneuver (RM) was performed before CT session at 45 cm of water (Pressure -Controlled mode with inspiratory pressure of 25 cm H₂O, and PEEP 20 cm H₂O, I/E ratio 1:1, RR 15x min, during 1 min). The TV was performed at 6 ml/kg, and FiO₂ and RR were adjusted to maintain O₂ sat =93%, and PaCO₂ < 55 mmHg. CTscan images were obtained for each position, and level of PEEP. t-test was used to compare results, with a p < 0,05 as significant. **Results.** We analyzed 9 ARDS patients, mean age 60±21 years (3 male), 5 medical - 4 surgical admissions, APACHE II 22± 6, SOFA 11± 3, SAPS II 46±10, MV time 50±18 hrs, PaO₂/FiO₂ 168±52, plateau pressure 25±2, compliance 34±5 ml/cmH₂O, and mean IAP was 11 ± 5 mmHg. Lung weight was 1233±377grs. Non aerated tissue was reduced from 471± 236 to 293,3±182 grs in supine, and from 441,9±230 to 232±190 grs. in PP. Only in PP the reduction of NAT was significant (p= 0,065 for supine, and p= 0,05 for PP). PRL was 14,4±8 % in supine, and 18±8% in PP (p= 0,26). At PEEP 15 cmH₂O, after RM , the percentage of well aerated tissue (WAT) was higher in prone than supine position (54±13 vs 60±11%, p= 0,038), and Hyperinflated tissue (HIT) and NAT were lower in PP than supine, but these difference were not significant (p=0.41, and p=0.28, respectively). **Conclusions.** Our preliminary data suggest that PP provide a better distribution of the lung regions, increasing WAT, and reducing NAT and HIT in comparison with supine position for the same level of PEEP after RM. PRL has a trend to increase in PP, but this needs to be confirmed by larger series.

EARLY NORMALIZATION OF CENTRAL VENOUS O₂ SATURATION AFTER EMERGENCY INTUBATION IN SEPTIC PATIENTS DOES NOT ASSURE AN IMPROVEMENT IN GLOBAL DYSOXIA.

G. Hernández, H. Peña, **R. Cornejo**, R. Castro, J. Retamal, M. Rovegno, I. Aránguiz, D. Angulo, A. Bujes, C. Pérez, A. Bruhn.

Introduction. ScvO₂ increases significantly early after emergency intubation in the majority of septic patients, although it is not clear if this represents a real improvement in global perfusion or dysoxia (1). Perfusion may be also evaluated by other parameters such as lactate or venous-arterial pCO₂ gradient (delta pCO₂). **objectives.** To evaluate if early normalization of ScvO₂ after emergency intubation in septic patients persists over time and if it is associated with similar trends in lactate and delta pCO₂. **Methods.** Ten septic patients subjected to emergency intubation for respiratory or circulatory failure and in whom ScvO₂ increased to > 65% after the procedure. These patients were included in a large prospective study published elsewhere (1). Patients used a common intubation protocol and we evaluated several perfusion related parameters before, 15 minutes and 6 hrs after emergency intubation. Statistical analysis included Friedman and Wilcoxon tests. **Results.** Evolution of perfusion parameters after intubation is presented in table 1. Five patients died during ICU stay. As a whole, ScvO₂ remained stable in 5 pts and decreased dramatically at 6 hrs by > 20% in 3 non-survivor patients (lowest 29%). Only 2 pts had a high lactate before intubation that did not normalize at 6 hrs (both non-survivors). Delta pCO₂ exhibited erratic changes over time with no correlation with ScvO₂ changes and with mortality. **Conclusions.** An early normalization of ScvO₂ after emergency intubation in septic patients does not assure a definitive improvement in global dysoxia and may not persist over time. Repeated and multimodal assessments of perfusion parameters may be necessary to guide sepsis resuscitation.

MONITORING INTRA-ABDOMINAL PRESSURE IN ARDS PATIENTS SUBJECTED TO DIFFERENT LEVELS OF PEEP, SEMI-RECUMBENT POSITION, AND PRONE POSITION

R. Cornejo, P. Suárez, C. Repetto, F. Bozán, J.C. Díaz, O.P. Llanos, C. Romero, E. Tobar, L.R. Gálvez, G. Díaz, A. Zamorano.

introduction. There is a high prevalence of intra-abdominal hypertension (IAH) in intensive care patients. In ARDS, the measurement of Intra-abdominal Pressure (IAP) could be important for a better interpretation of respiratory mechanics, and appropriate setting of the

ventilator. Although prone position (PP) is considered simple and safe, it could be associated with an increase in IAP and potential adverse effects. The same applies to semi-recumbent position. We evaluated the changes of IAP in response to changes of body positioning, and different positive end-expiratory pressure (PEEP). Methods. Nine ARDS patients were included. The values for IAP in supine (head of the bed elevated to 0, and 45 degrees), and PP, were registered at PEEP 5, and 15 cm H₂O, after 15 min in each position and level of PEEP. IAP was measured by the bladder pressure method. All patients were sedated-paralyzed, and ventilated in volume-controlled ventilation with TV of 6 ml/kg. FiO₂ and RR were adjusted to maintain O₂ sat >93% and PaCO₂ < 55 mmHg. Respiratory mechanic and hemodynamic status were evaluated during the study. IAP values were compared with t-test. $p < 0,05$ was considered statistically significant. Results. We analyzed 9 ARDS patients, mean age 60 ± 21 years (3 male), 5 medical - 4 surgical admissions, APACHE II 22 ± 6 , SOFA 11 ± 3 , SAPS II 46 ± 10 , 50 ± 18 hrs of mechanical ventilation (MV), PaO₂/FiO₂ 168 ± 52 , and Compliance 34 ± 5 ml/cmH₂O. Mean IAP was 11 ± 5 mmHg before the study. In supine, the effect on IAP showed a trend to significance when changing the position from 0° to 45° ($p=0,058$). There were no differences when IAP was registered with PEEP 5 and 15 cm H₂O in supine position, either at 0° or 45°, ($p=0,251$). Likewise, we did not find significant differences in IAP when comparing supine versus prone position for each level of PEEP ($p=0,145$ for PEEP 5, and $p=0,064$ for PEEP 15). We did not find difference in IAP between patients with primary vs secondary ARDS at PEEP 5cmH₂O. Patients with secondary ARDS had higher levels of IAP than primary ARDS patients at 45° with 15 cmH₂O of PEEP ($p = 0,028$), and it was at limit of significance when we comparing these subgroups in prone at PEEP 15 cmH₂O ($p = 0,051$). Only patients who increased IAP >5 mmHg at 45° with respect to 0°, showed a significant decrease on compliance (6 of 9 pts, from 38 ± 4 to 30 ± 4 ml/cmH₂O, $p < 0,012$). We did not find any significant variation in hemodynamic variables with the changes on IAP values. Conclusions. The results obtained suggest that changes in position and PEEP, in ARDS patients produce at most mild changes in IAP. Secondary ARDS patients ventilated with 15 cmH₂O of PEEP in semi-recumbent position (and probably in prone too), exhibit higher IAP than primary ARDS patients. Semi-recumbent position can affect significantly the compliance when IAP increased >5 mmHg from 0° to 45°. However, larger studies would be needed to confirm these findings.

10th CONGRESS OF THE WORLD FEDERATION OF INTENSIVE AND CRITICAL CARE MEDICINE – FLORENCIA, ITALIA – 28 AGOSTO AL 1 SEPTIEMBRE.

SWALLOWING DYSFUNCTION IN CRITICAL CARE PATIENTS WHO REQUIRE PERCUTANEOUS DILATATIONAL TRACHEOSTOMY.

Romero CM, Marambio A, Larrondo J, Lira MT, Cornejo R, Gálvez R, Llanos OP, Tobar E, Espinoza MA, Ruiz M.

Background/objectives: Evidence suggests that prolonged mechanical ventilation (MV) might be a risk factor of developing swallowing dysfunction in critical care patients. This dysfunction predisposes to pulmonary aspiration and pneumonia and also could delay the tracheostomy decannulation process. The aim of this study was to determine swallowing dysfunction's incidence in critical care patients who require percutaneous dilatational tracheostomy (PDT) for prolonged MV, and to compare the duration of the cannulation period in patients with and without swallowing dysfunction. Methods: A total of 40 patients without neurologic disorders who require PDT for prolonged MV were included. The study was approved by the Institutional Ethics Committee of the University of Chile Clinical Hospital. Written informed consent was obtained from each patient's next of kin. Demographic and clinical data as APACHE II, duration of MV (total and previous to PDT) and length of stay in Critical Care Unit (CCU) were collected. Previously to the tracheostomy decannulation process an otolaryngologist performed a fiberoptic endoscopic exam of the swallow (FEES). We used ANOVA for the analysis; the results are presented as mean values \pm SD. Results: Mean age was 62 ± 15 y (19 women, 21 men) APACHE II score was 21 ± 2 , time of MV previous to PDT was 20 ± 11 days, total MV duration was 38 ± 16 days and CCU stay was 63 ± 27 days. Time of intubation to FEES was 43 ± 13 days. The incidence of swallowing dysfunction in this group of patients was 37.5% (15/40). The time period between FEES to tracheostomy decannulation process was 19 ± 11 days in patients with swallowing dysfunction vs. 2 ± 4 days in those patients without dysfunction ($p < 0.0001$). No difference was found in the time period of MV previous to PDT between patients with and without swallowing dysfunction (19 ± 7 vs. 20 ± 10 days, $p = 0.6$). Length of stay in CCU was significantly shorter in patients without swallowing dysfunction (69 ± 23 vs. 47 ± 19 days, $p = 0.003$). Conclusions: More than one third of patients requiring PDT for prolonged MV presented swallowing dysfunction. Patients that developed this dysfunction experimented a significant delay in their tracheostomy decannulation process and stayed longer at CCU.

CENTRO DE IMAGENOLOGÍA

17th EUROPEAN CONGRESS ON OBESITY – AMSTERDAM, HOLANDA- 2 AL 6 MAYO.

5 YEARS INCIDENCE OF OSTEOPOROSIS IN CHILEAN ELDERS AND ITS ASSOCIATION WITH OBESITY AND HAND-GRIP STRENGTH.

C. Albala, L. Lera, **P. Arroyo**, A. Fuentes, H. Sánchez.

Objective: To study the association between BMI and hand-grip strength with bone mineral density in community-living Chilean elders. Methods: Follow up of the Santiago SAGE survey done in 2000 in 1202 subjects with complete measurements aged 60 and older residing in Santiago Chile. All the available people free of self reported osteoporosis or hip, wrist or spine fractures in 2000 were

evaluated in 2005 to determine the RR of having osteopenia/osteoporosis according baseline BMI and dynamometry. DEXA scan, biochemical exams and complete anthropometry were done in 321 subjects (127 men mean age 68.8 ± 6.07 , 194 women mean age $69y \pm 6.75$). WHO standards for BMI classified people in underweight, normal, overweight and obese. WHO standards for Bone Mineral Density (BMD) classified them in normal, osteopenia and osteoporosis. Being under p25 of baseline value was defined as low dynamometry. Results: Crude 5y incidence of osteoporosis was 35.6 % for women and 11.8% for men. Baseline BMI and dynamometry were inversely associated with 5y BMD ($p < 0.01$). The 5y incidence of osteoporosis (logistic model) was associated with obesity (RR 0.17 95%CI: 0.07, 0.46), low dynamometry (RR:3.91; 95%CI:1.23, 12.33), age (RR: 1.98 95%CI:1.22, 3.22) and sex (male RR:0.75; 95%CI:0.04,0.16). The RR for osteopenia was associated with low dynamometry (RR:3.70; 95%CI:1.28, 10.74) and being male (RR:0.19; 95%CI:0.10, 0.33) Conclusion: Obesity is an independent protector factor for osteoporosis in the elderly. Besides having a $BMI \geq 30$, dynamometry has a strong inverse association with incidence of both osteopenia and osteoporosis in the elderly.

ASSR 2009 ANNUAL SYMPOSIUM (AMERICAN SOCIETY OF SPINE RADIOLOGY) – LAKE BUENA VISTA, USA- 18 AL 21 FEBRERO.

MR NEUROGRAPHY FOR EVALUATING LUMBAR-RADICULAR PAIN.

Cristián Matus.

Purpose. To evaluate use of magnetic resonance (MR) neurography identifying sciatic nerve abnormalities in patients with unexplained sciatic radicular pain. Methods & Materials. Case series: 7688 spine MR. 322 neurography. 197 patients with radicular pain were referred for MR neurography of the lumbosacral plexus and sciatic nerves. MR using phased array surface coils were performed in sagittal and axial T2 weighted images of the spine. Fast spin echo inversion recovery sequences in coronal planes, and gadolinium enhanced imaging of the cauda equine and plexus were obtained. Additional images of the muscle were performed. Lumbosacral plexus and/or sciatic nerve were identified using anatomic location, fascicular morphology, and signal intensity of the roots, plexus, nerve, and muscles. None of the previous routine MRI studies of the lumbar segments of the spinal cord had established the cause of the reported symptoms. Results. MR neurography showed intrathecal radiculitis, muscular entrapment, and extension of inflammatory processes of the adjacent facet joint. As well as, plexitis, neural sheath tumour, infiltrative processes, and compromise of the adjacent inflammatory processes by contiguity were found associated to radicular sciatic pain. Conclusion. MR neurography may recognize several other causes of radicular sciatic pain and might be a good complementary imaging study for detecting causes of non-discal sciatica.

FE DE ERRATAS

En la Revista N°4, año 2009 (volumen 20) dedicada a la Educación Médica, faltó mencionar que los Editores Adjuntos de este número especial fueron los Profesores: Patricia Gómez Morales, Ilse López Bravo y Eduardo Rosselot Galleguillos. Pedimos a éstos nuestras más sinceras disculpas por la omisión.