

Abstracts presentados en congresos internacionales 2014

DEPARTAMENTO DE CARDIOLOGÍA

15TH WORLD CONGRESS ON PAIN - BUENOS AIRES, ARGENTINA

ISOBOLOGRAPHIC ANALYSIS OF THE OPIOID-OPIOID INTERACTIONS IN A TONIC AND A PHASIC MOUSE MODEL OF INDUCED NOCICEPTIVE PAIN

S. Lux, N. Lobos, R. Zepeda, V. Noriega, J. Prieto, H. F. Miranda,

Aim of Investigation: Opioids have been used for the management of pain for a long time, and coadministration of two opioids may induce synergism. **Methods:** In a model of tonic pain, the acetic acid abdominal constriction test in mice (writhing test) and in a phasic model of induced pain, the hot plate assay, the antinociceptive interaction between fentanyl, methadone, morphine, and tramadol was evaluated. **Results:** Intraperitoneal administration of each drug resulted in a dose-dependent antinociceptive activity in writhing test and hot plate. The dose that produced 50% antinociception (ED50) was used in a fixed ratio for each of the six pairs of opioid combinations. The coadministration of these drugs, in the writhing test, resulted in a synergic antinociception with an interaction index between 0.226 (morphine/methadone) to 0.522 (fentanyl/tramadol), however, in the hot plate, the opioid coadministration resulted synergic, in all the mixture with interaction index from 0.532 (morphine/methadone) to 0.690 (morphine/tramadol), with the exception of methadone/tramadol (1.008) and fentanyl/tramadol (1.047) which they were only additive. The coadministration of opioid drugs in hotplate resulted in a synergistic interaction between morphine with methadone (0.532), methadone with fentanyl (0.571), morphine with fentanyl (0.606) and morphine with tramadol (0.690). The mixtures methadone with tramadol (1.008) and fentanyl with tramadol (1.047) resulted only additive. **Conclusions:** Opioid-opioid combinations may be helpful in pain treatment, given the different profile of activity of individual drugs in the mixture and the possibility of reducing their dosage, with the obvious advantages of reducing side effects.

ANTINOCICEPTIVE SYNERGISM OF GABAPENTIN AND NORTRIPTYLINE IN MICE WITH PARTIAL SCIATIC NERVE LIGATION

N. Lobos, S. Lux, H. F. Miranda, V. Noriega, R. Zepeda, J. Prieto

Aim of Investigation: Neuropathic pain could be due to nerve injury caused by loose ligature of the sciatic nerve. Tricyclic antidepressants, e.g. nortriptyline and antiepileptic drugs, as gabapentin have been suggested for alternative treatment of neuropathic pain. The objective of this study was to evaluate the synergism of the antinociceptive effect of gabapentin and nortriptyline in a murine model of neuropathic pain. **Methods:** In this present research, partially ligated sciatic nerves (PLSN) in mice were used, which mimics characteristics of patients in neuropathic pain. Then the effect of gabapentin and nortriptyline in thermal hyperalgesia was evaluated using the hot plate assay on PLSN. Furthermore, the degree of interaction between the drugs was measured using the isobolographic analysis. **Results:** Gabapentin (3-100 mg/kg, ip) or nortriptyline (1-30 mg/kg, i.p.) induced dose-dependent antinociceptive activity in mice, with an ED50 of 11.60 ± 0.54 mg/kg for gabapentin and of 5.16 ± 0.21 mg/kg for nortriptyline. PLSN at 7 days did not modify the potency of gabapentin; however, the potency of gabapentin at 14 days and nortriptyline at 7 and 14 days after PLSN were significantly increased ($P < 0.05$) when compared to the control group. The combination of gabapentin with nortriptyline, in a 1:1 ratio of their ED50, demonstrated a synergistic effect with an interaction index of 0.289 and 0.373 for animals with PLSN at 7 and 14 days, respectively. **Conclusions:** It is likely that the activation of different antinociceptive pathways due to this combination may lie at the basis of this effect. In conclusion, the data showed a synergy for the antinociception of the 1:1 ratio of gabapentin with nortriptyline in PLSN mice. The finding of this study, suggests that the combination of gabapentin and nortriptyline provides a therapeutic alternative that can be used for neuropathic pain management.

DEPARTAMENTO DE CIRUGÍA

16TH ANNUAL HERNIA REPAIR - LAS VEGAS, USA

LAPAROSCOPIC HERNIOPLASTY AND MULTIPLE SURGERY, PRELIMINARY RESULTS CLINICAL HOSPITAL UNIVERSITY OF CHILE
Alban M, Carrasco J, Dominguez C, Rappoport J, Silva J, Palacios F, Salazar V

Introduction: Laparoscopic surgery is an alternative for the treatment of hernias and multiple surgery. Advances in prosthesis, meshfixation and instruments with early return to work and less postoperative pain under this method has enabled progress in perfecting this technique. Materials And Methods: We evaluate our digital database of the Hernia Unit of the Clinical Hospital of the University of Chile, made in File Maker Pro including 46 variables. From January 2011 to June 2013, 102 patients were operated for a total of 164 hernias by this method, 16 of these cases also had other pathology of surgical resolution. Results: 50 (49%) women and 52 (51%) men have been operated by this technique, the average age was 52 years, with a BMI of 28 (17-41). Surgery time: 104 minutes (30-250), with three days hospitalization (1-5). 47 (46%) showed only one hernia, the remaining cases have multiple hernias (2 rings: 39 patients, three rings: 14 patients, 4 rings: 2 patients). The surgery was elective in 100%.Hernia type: Inguinal 57%, incisional 19.5%, other 23.5%. In 100% prosthesis was used, light polypropylene for inguinal (TAPP) and composite mesh for incisional hernias. In 16 cases other surgical pathology resolved in the same surgery without requiring conversion to open surgery procedure; installation of peritoneal dialysis catéter 3 patients, cholecystectomy 11 cases, sleeve gastrectomy 1 case, transurethral prostatectomy 1 case. There was no mortality in this series. Conclusions: Laparoscopic surgery appears to be a safe technique for the treatment of hernia associated with other diseases. We need more studies and monitoring to recommend this technique.

UMBILICAL HERNIA. IMPLEMENTATION OF A DIGITAL DATA BASE

Rappoport J, Dominguez C, Carrasco J, Alban M, Silva J, Rappoport D, Salazar V, Bencina F, Palacios F

Introduction: The implementation of a digital database, will optimize the evaluation of the treatment of this disease. Methods: We present a digital database, based on FileMaker Pro program, used in Hernia Unit, Department of Surgery, Clinic Hospital, University of Chile, which includes 46 variables. From January 2009 to June 2013, 1,799 patients have been entered into the database, of which 188 (10.45%), corresponding to umbilical hernias, 94 females (50%) and 94 male (50%). Mean age 54±13.6 years. Results: The average BMI was 24.76. Operative time 93 mins. (Range 20-220). Elective Surgery 168 (89%). Emergency 20 (11%). Two of them were presented as strangulated hernia, and required bowel resection. 107 presented a single ring defect and 81 (53%) presented two or more defects. Mesh repair was performed in 169 cases, (90%) and simple repair in 19 (10%), mainly in emergency cases. Open onlay mesh was performed in 111 patients (65.6%), preperitoneal or retromuscular in 42 cases (24.8%), and laparoscopic approach in 16 cases (8.5%). Drainage was used in 55 cases (29.2%). Heavy weight polypropylene mesh was implanted in 120 patients (71%), composite mesh for intraperitoneal position 16 (9.5%), light weight polypropylene in 16 (9.5%), polyester autoadhesive in 16 (9.5%), and absorbable polyglactin mesh in 1 case (0.59%). 124 patients, (66%), presented as primary hernia, 34% had one or more recidives. Postoperative morbidity occurred in 21 patients, 2 (1.06%) in elective and 19 (10.1%) in emergency. $p < 0.05$. There was no mortality in this series. The average hospital stay was 3 days. Comment: The implementation of a digital record, will more accurately assess the results of treatment of umbilical hernias. Long term follow up, will let us to evaluate the real utility of the techniques described in this serie.

FEMORAL HERNIA, RESULTS AND QUALITY OF LIFE

Carrasco J, Muñoz A, Dominquez M, Alban M, Rappoport J, Rappoport D, Norambuena M, Huerta C, Torres R

Introduction: Femoral Hernia (FH) represent only 2 to 5% of hernia surgery and a high risk of strangulation. Emergency bowel resection is associated with 6 to 25% of mortality. The purpose of the present study is to evaluate demographic issues, surgical treatment and quality of life of FH patients. Materials and methods: Computed data base was used to register 46 variables, like age, sex, elective (EIS) or emergency surgery (EmS) and postoperative morbidity. Quality of life was assessed with a telephonic follow up of a previous validated test T student was performed for statistical analysis and a $p < 0.05$ was considered significative. Results: Since January 2002 to June 2013, 211 patients were included. 48 men (22.75%), female 163 (77.25%). Elective Surgery (EIS) was performed in 157 patients (74.41%) and emergency surgery (EmS) in 54 (29.9%). Mean age of 55.3 years for EIS and 72.8 years for EmS. $p < 0.007$. Length of hospital stay, 2.37 days for EIS and 7.02 days for EmS. $p < 0.002$. Postoperative morbidity 3.82% EmS and 32.65% for Em. $p < 0.0001$. Postoperative mortality 0% EIS and 3.7% Em. $p < 0.002$. Quality of life assessed in 86 patients (37.9%) revealed: Excelent 44 patients (51.16%). Very good 20 (23.26%), good 13 (15.12%), bad 6 (6.98%) and very bad 3 (3.49%). Comments: FH had a low frequency but a high risk of emergency surgery. Mortality after bowel resection was 18.18% in this series. Female incidence is accord with other series.

Mean age of emergency cases was 20 years older than elective cases, suggest that EmS was in patients with FH of longer evolution and efforts for early diagnosis and elective surgery may improve the results of surgical treatment in this pathology.

DEPARTAMENTO DE NEUROLOGÍA Y NEUROCIRUGÍA

AMERICAN ACADEMY OF NEUROLOGY 66TH ANNUAL MEETING - PENNSYLVANIA, EEUU

ISCHEMIC STROKE AND CERVICAL ARTERY DISSECTION. RISK FACTORS AND FUNCTIONAL OUTCOME IN A SINGLE TERTIARY CARE HOSPITAL: THE CLINICA ALEMANA STROKE REGISTRY (RECCA), 1997-2003

Violeta Diaz, Maria Pilar Vicuña, Jose Manuel Fernandez, Marcela Valenzuela, Pablo Lavados

Objective: To study risk factors associated to functional outcome in patients with ischemic stroke and cervical artery dissection. **Background:** Cervical artery dissection has an estimated annual incidence of 2.6 / 100,000 inhabitants, causing only 2% of all strokes, but up 25% of cases in those under 45 years. It is has low case-fatality less than 5%, with a good functional outcome in about 75% of cases. **Methodology:** This is a single center, descriptive study of a prospective registry in Clínica Alemana de Santiago, Chile, from 1997 to 2013. We used the Oxford Community Stroke Project Classification for clinical classification. All patients were studied with CT-angiography, MR angiography or conventional angiography. The variables were age, sex, NIHSS at admission, cardiovascular risk factors, quantitative PCR, blood sugar, leukocytes, treatment, stroke recurrence in hospital and modified Rankin scale. Rankin score was dichotomized into good prognosis (0 to 2) and bad prognosis (3 to 6) for analysis. We used chi-square, ANOVA and logistic regression modeling for statistical analysis between groups. **Results:** A total of 1787 ischemic stroke patients were registered in the RECCA during the study period , of which 83 (4.6%) had cervical artery dissection. The mean age was 44.9 years (SD 12.4) and 56.6% were men. 78.9% had a good outcome at discharge and 3.9% died. Bad prognosis was associated with hypertension, TACI, pneumonia, elevated leukocyte count and high NIHSS at admission in univariate analysis. In multivariate logistic regression model, the only significant factor associated to prognosis was the NIHSS at admission, with a mean value of 2.2 and 11.9 for good and bad prognosis respectively ($p=0.002$, 95% CI 1.14-1.8). **Conclusions:** The prognosis of ischemic stroke patients with cervical artery dissections is generally good. The only variable associated with a worse prognosis, was a high NIHSS at admission. This allows early identification of a group of patients who are at increased risk of significant disability at discharge.

WORD STROKE CONGRESS 2014 – ESTAMBUL, TURQUÍA

ISCHEMIC STROKE IN ELDERLY PEOPLE. ETIOLOGY BY GENDER. SINGLE CENTER REGISTER 2003 TO 2013

V. Diaz, V. Olavarria, A. Prat, A. Valdivia, M. Guzman, J.M. Fernandez, A. Brunser, P. Lavados.

Background: Stroke by gender differ. The incidence is high in men than women and decrease at 75 years old in men and increase in women. The mean age for men is at list 5 years before and the case fatality rate is higher in women. The cardiovascular risk factors (CVRF) are different by gender, the women have systolic blood presion and blood cholesterol higher than the men but Tabaco and alcohol intake is higher in men. **Objectives:** to compare cardiovascular risk factors (CVRF), treatment and time to consult by gender, in adults that are 80 years age and older. To analyze age, NIHSS to admission, localization, etiology, treatment, complications, discharge condition and recurrence. **Methodology:** A descriptive study comparing elderly over 80 years old with ischemic stroke by gender. We analyzed (infarction and transitory ischemic attack) from 2003 to 2013. CVRF were compared, aspirin use or oral anticoagulation treatment (ACO) and time to attend. In infarction subgroup it was compared localization, NIHSS, thrombolysis, etiology, treatment, complications, impatient time, mRanking scale and recurrence. **Results:** from 1787 patients in RECCA register, 386 patients were elderly (21.6%), 60,4% women. Blood hypertension (BH), diabetes mellitus (DM) and alcoholism (OH) were frequent in men ($p=0,02$; 0,0002; 0,007). NIHSS was higher in women ($p=0,02$). The Infarction subgroup ($n=332$), cardio embolic etio logy frequent in women ($p=0,05$) and higher-ranking scores ($p=0,03$ at discharge. **Conclusion:** In elderly patients with IS, HTA, DM, OH are more frequent en men. The women present more cardio embolic etiology and worse prognosis at discharge.

15TH WORLD CONGRESS ON PAIN - BUENOS AIRES, ARGENTINA

SOMATOSENSORY EVOKED RESPONSES TO PAINFUL AND NOT PAINFUL ELECTRICAL STIMULI. A COMPARISON IN HEALTHY VOLUNTEERS.

G. Barraza, J. M. Matamala, M. Campero, J. L. Castillo, R. J. Guiloff

Aim of Investigation: Long latency somatosensory evoked potentials after painful electrical stimuli may not evaluate selectively the

thermoalgesic pathway. Whether they evaluate in some way the experience of pain is not clear. We investigate whether the features of these evoked potentials can differentiate between intensities of electrical stimuli VAS graded as painful and non-painful. Methods: We studied 9 healthy subjects (6M, 3W), mean age 39.4 years (range 26-69). Trains of 10 paired (ISI 5ms) 0.5 ms duration electrical stimuli at 0.1 Hz were delivered with ring electrodes to the middle finger and the second toe. Superimposed recordings of two trains of stimuli were made from CZ referred to A1/A2. Filters were 0.1-100 Hz. Two stimuli intensities were given at VAS 0 (threshold and about twice the threshold intensity of electrical stimulation), one eliciting a VAS 1-3 (discomfort) and another eliciting a VAS 4-10 (pain). Latencies to N1 and peak to peak (N1-P1) amplitudes of the evoked potentials were measured. Parametric and non-parametric statistics were used as appropriate (Statgraphics Rv XV, Statpoint Inc.). The study was approved by the local Ethical Committee. Results: Data from stimulation of 9 upper and 8 lower limbs for all the VAS levels were available. A total of 68 recordings were made (36 in the upper, and 32 in the lower, limbs). Mean N1 latency in the upper limbs was 139.6 ms \pm SD 25.7 and in the lower limbs 153.9 ms \pm SD 28.2. No obvious difference was observed in the morphology of the evoked potentials obtained with painful and non painful stimulation. There was a significant number of absent evoked responses in the VAS 0 group compared with the VAS 1-4+ (13/34 versus 2/34, $p=0.001$). There were no absent evoked responses in the VAS 4+ group and 2 in the VAS 1-3 group. There was a significant increase in the mean amplitude of the evoked responses in the VAS 1-4+ (24.6 μ V, SD 15.1) compared with VAS 0 (12.5 μ V, SD 14.0) group (ANOVA, F-Ratio 11.66, $p=0.001$). There was no relation though between amplitude of N1-P1 and intensity of electrical stimulation. There was an inverse relation between latency of N1 and amplitude of N1-P1 ($n= 68$, Correlation coefficient -0.38, R-squared =14.9, $p=0.004$). Conclusions: Evoked responses to upper and lower limb electrical stimuli are more frequently absent with non painful than with painful electrical stimuli. The mean amplitude of the evoked responses is larger with painful stimuli though there is no clear relation between the intensity of electrical stimulation and the amplitude of the evoked responses. Evoked responses of long latency to electrical stimuli are complex as they can be elicited with non painful stimuli but they may also have some relation to pain mechanisms.

CONTACT HEAT EVOKED POTENTIALS IN PAINFUL AND NON PAINFUL PERIPHERAL NEUROPATHIES

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Aim of Investigation: Contact heat evoked potentials (CHEPS) evaluate central and peripheral thermoalgesic pathways. We study whether CHEPS may behave differently in painful and non painful peripheral neuropathies. Methods: We have studied so far 54 subjects, 35 M, 19 F, 9 healthy subjects and 45 patients with central and peripheral lesions, with and without neuropathic pain. Mean age 54.7 years (range 21-83). Thirty patients had peripheral neuropathies, 21 painful and 9 not painful. CHEPS (Pathway, Medoc, Israel): 572.5 mm² thermode was placed on the distal forearm and leg, baseline T° 37 °C target T° 54°C, 100°C/sec rate, 2 trains of 10 stimuli with a random interstimulus interval of 10-15 seconds. Superimposed recordings of two trains of averaged stimuli were made from CZ and FpZ referred to A1/A2. Filters 3-100 Hz. Off-line analysis of N2 latency and N2-P2 peak to peak amplitude. Parametric and non parametric statistics as appropriate were made with Statgraphics v XV (Statpoint Inc.). Results: The morphology of CHEPS was similar in painful and non painful polyneuropathies. CHEPS were absent in the legs significantly more in non-painful polyneuropathies (8/9) (Chi square, $p=0.02$) than in controls. In the painful group they were also absent frequently (14/21) but due to the low number of controls this did not reach statistical significance. The mean amplitude of lower limb CHEPS in painful (6.1 μ V \pm SD9.7) and non painful polyneuropathies (1.7 μ V \pm 5.2) was smaller than in controls (11.9 μ V \pm SD11.9) (ANOVA, F-ratio 3.63, $p=0.03$). The N2 latency was prolonged in the lower limb in painful polyneuropathies (mean 611.2ms \pm 152) compared to controls (480.2 \pm 80.5) ($p=0.06$). Conclusions: There is an increased number of absent responses and a reduction in mean amplitude of CHEPS to caloric stimuli on the leg in patients with peripheral neuropathies, with and without pain, compared to patients with central lesions and healthy subjects. The technique does not appear to differentiate between painful and non painful peripheral neuropathies.

DEPARTAMENTO DE OBSTETRICIA Y GINECOLOGÍA

WORLD CONGRESS ULTRASOUND IN OBSTETRICS AND GYNECOLOGY 2014 (ISUOG) – BARCELONA, ESPAÑA

FIRST AND SECOND TRIMESTER COMBINED SCREENING FOR PRE-ECLAMPSIA

A. Sepúlveda-Martínez, R. Guíñez, F.J. Diaz, H.E. Tobar, E. Valdes, G.I. Rencoret and M. Parra-Cordero

Objectives: To determine the detection capacity of early-onset pre-eclampsia (ePE) with a combined first and second trimester screening model. Methods: Longitudinal study in 4,063 singleton pregnancies that attended for an 11 + 0 - 13 + 6 and 20 + 0 - 24 + 6 weeks ultrasound, which included the prediction of ePE by combining maternal history and Uterine Artery Doppler (UtAD) at first

trimester (1T) and only UtAD at second trimester (2T). Maternal characteristics were prospectively entered into a database. An ePE 1T predictive model created in our Unit was used (S:60%, FPR:10%, cut-off 2.1%). The same patients were assessed at 20 + 0 - 24 + 6 weeks with UtAD and re-classified in a high risk group of ePE according to mean UtAD pulsatility index (PI), if 95th centile was reached. Final high risk patients were selected by combining both models. Results: During the study period 129 patients developed PE (3.2%), of these 26(0.6%) were ePE (delivery <34 weeks). Independently, the ePE predictive models in 1T and 2T demonstrated a sensitivity and FPR of 42.3% (n = 11/26) and 9.5% vs 80.8% (n = 21/26) and 5.2%, respectively. When both models were combined, 387 patients were assigned at risk of ePE (9.5%) during the 1T. When UtAD was evaluated in this group during the 2T, only 72 patients were re-classified as a high risk of ePE (1.7%). In the combined high risk group is the 90.9% (n = 10/11) of patients detected during the 1T of pregnancy. The only patient not identified with the 2T model was a patient with chronic hypertension and lupus. Combined sensitivity of the sequential model was 38.5% (n=10/26) with a combined FPR of 11.2%. Conclusions: This study confirms that 2T UtAD is better than 1T screening for ePE. However, because ePE prevention is based in the use of aspirin before 16 weeks, 1T screening is the best strategy to detect this condition. The combined model demonstrated a sensitivity of about 40% and a FPR of 11%, but with a 5-fold reduction of any preventive strategy started during the 1T.

FIRST-TRIMESTER MATERNAL BIOCHEMICAL MARKERS AS PREDICTORS OF SPONTANEOUS EARLY PRETERM DELIVERY

Objectives: The aim of this study was to evaluate whether maternal biochemical markers are altered during the first trimester of pregnancy and its role as a screening test for spontaneous early preterm delivery (sPTD). Methods: Biophysical (cervical length and uterine artery Doppler) and biochemical markers (maternal α -fetoprotein [AFP], matrix metalloproteinase-9 [MMP-9] and TNF soluble receptor 1 [TNF-R1]) were assessed at 11-13 weeks' gestation in a case-control study which included 16 women who later developed sPTD before 34 weeks and 49 matched controls delivering after 34 weeks. The distribution of measured biophysical and biochemical markers in the control and sPTD before 34 weeks were compared. Logistic regression analysis was used to evaluate if any variable was significantly associated with sPTD before 34 weeks. Results: Neither cervical length, uterine artery Doppler and TNF-R1 were associated with sPTD. The maternal MMP-9 and AFP were significantly correlated with gestational age at delivery ($r = -0.28$ and -0.26 , respectively). However, the median AFP at 11-13 weeks was the only biochemical marker assessed in this study that was significantly higher in women who later delivered before 34 weeks gestation compared to control (15.5 [12.8–28.7] vs 12.6 [5.6–20.4], $p = 0.03$). Logistic regression analysis demonstrated that AFP provided a significant contribution in the prediction of sPTD before 34 weeks, being the detection rate, at a fixed 10% false positive rate, at around 31%. Conclusion: Firstly, the finding of this study that MMP-9 and AFP were negatively correlated with gestational age at delivery supports the hypothesis that sPTD might be associated with altered spiral artery remodeling and placental damage. Secondly, the increased maternal AFP was the only marker that improves the detection rate of sPTD during the first trimester of pregnancy.

DEPARTAMENTO DE OTORRINOLARINGOLOGÍA

167TH MEETING OF THE ACOUSTICAL SOCIETY OF AMERICA - RHODE ISLAND, USA

PERIPHERAL EFFECTS OF THE CORTICO-OLIVOCOCHLEAR EFFERENT SYSTEM

Paul H. Delano

The auditory efferent system comprises descending pathways from the auditory cortex to the cochlea, allowing modulation of sensory processing even at the most peripheral level. Although the presence of descending circuits that connect the cerebral cortex with olivocochlear neurons have been reported in several species, the functional role of the cortico-olivocochlear efferent system remains largely unknown. We have been studying the influence of cortical descending pathways on cochlear responses in chinchillas. Here, we recorded cochlear microphonics and auditory-nerve compound action potentials in response to tones (1–8 kHz; 30–90 dB SPL) before, during, and after auditory-cortex lidocaine or cooling inactivation (n=20). In addition, we recorded cochlear potentials in the presence and absence of contralateral noise, before, during, and after auditory-cortex micro-stimulation (2-50 μ A, 32 Hz rate) (n=15). Both types of auditory-cortex inactivation produced changes in the amplitude of cochlear potentials. In addition, in the microstimulation experiments, we found an increase of the suppressive effects of contralateral noise in neural responses to 2–4 kHz tones. In conclusion, we demonstrated that auditory-cortex basal activity exerts tonic influences on the olivocochlear system and that auditory-cortex electrical micro-stimulation enhances the suppressive effects of the acoustic evoked olivocochlear reflex.

DEPARTAMENTO DE MEDICINA

GASTROENTEROLOGÍA

JOINT INTERNATIONAL CONGRESS OF ILTS, ELITA & LICAGE – LONDRES, INGLATERRA

SURVIVAL, IMMUNOSUPPRESSION AND MORTALITY RISK FACTORS IN 207 LIVER TRANSPLANTATION CHILEAN PATIENTS.

Juan Pablo Miranda, Jaime Poniachik, Danny Oksenberg, Jose Ibarra, Jaime Castillo, Juan Carlos Diaz

Introduction: Orthotopic liver transplantation (OLT) has become an effective procedure for patients with advanced liver disease, In our country there are not publications in relation the risk factors involved in graft survival in OLT. Aim: To evaluate the immunosuppression risk factor involved in graft survival in OLT at the Hospital Clinic, University of Chile. Methods: From 2002 to nov-2013, 207 liver transplantation from cadaveric donors were performed at the Hospital Clínico Universidad de Chile. 178 (85.9%) received CsA-me or generic tacrolimus as primary immunosuppression. We evaluated clinical variables, risk factors and the survival of these patients. Results: 43.9% received CsA-me and 50.3 received Tac. Median age was 53.4 ± 10.9 (21-69) years, not differences for sex. Causes for transplantation in CsA-me group was HCV 34.2%; NASH 16.3%; alcoholic cirrhosis 15.2%; cryptogenic cirrhosis 11.5%; other 22.8% and in the Tac group: NASH 29.9%; alcoholic cirrhosis 19.4%; autoimmune hepatitis 15.2%, cryptogenic cirrhosis 12.4%; and other 23.1% (p=ns). Graft Survival analysis of group CsA-me were 85%, 74% and 63% at 1,3 and 5 year, respectively, on group Tac were 92%, 83% and 71% respectively (log rank $p < 0.0001$). The risk factor associated to mortality was hematocrit and hemoglobin difference between the time of registration on the waiting list and pre-OLT of 2 % points and 0.5 g/dl, HR 4.2 (1.6 – 6.4) and 3.1 (1.2 – 4.0) respectively. The infections (43.7% v/s 27.6%) and moderate and severe graft rejections (22.4% v/s 11.8%), were more frequent at CsA-me group ($p < 0.0001$). No Differences in acute kidney failure and de-novo insulin-requiring diabetes mellitus were seen. Conclusion: The hematocrit and hemoglobin difference between the time of registration on the waiting list and pre-OLT was a risk factor associated to mortality. Tac has superior to CsA-me in improving survival (patient and graft) and preventing acute rejection in OLT.

1ST FEDERATION OF NEUROGASTROENTEROLOGY AND MOTILITY MEETING (FNM2014) - GUANGZHOU, CHINA

THE INCREASE OF INFLAMMATORY RESPONSE IS RELATED TO ANXIETY SYMPTOMS IN CHILEAN PATIENTS WITH IBS
Marcos Espinoza , Alfonso Miranda , Ana Maria Madrid , Glauben Landskron , Ignacio Parra , Laura Carreño , Felix Martin, Fabian Alvarez , Pablo Canales , Claudia Defillipi , Veronica Torres , Lucia Valenzuela , Alejandro Escobar , Kevin Lomasney, Sergio Arancibia , Caroll Beltran

INTRODUCTION: Irritable bowel syndrome (IBS) is one of the most common health disorders in the world as well as in Chile. IBS is characterised by abdominal discomfort associated with alterations in bowel habit, because a bi-directional disequilibrium in the gut-brain axis that affects the interaction between the nervous and intestinal immune systems. However, the relationship between alterations in intestinal mast cell number, low-grade inflammation status and clinic symptoms associated to anxiety and depression remain unsolved in IBS. We think that increase in intestinal mast cell number could be relevant to the inflammatory response and anxiety/depression symptoms in Chilean patients with IBS. OBJECTIVE: To assess the relationship on the number of intestinal mast cell, the systemic inflammation and anxiety/depression symptoms between IBS patients and healthy controls (HC). METHODS: Healthy controls (HC) and diarrhoeapredominant IBS patients (D-IBS), diagnosed by Rome III criteria from Hospital Clínico Universidad de Chile, were enrolled. Mast cells number in intestinal mucosal biopsies from ileum and sigmoid-colon, obtained by colonoscopy, were analysed by immunofluorescence for tryptase. Levels of plasma IL-6 were determined by ELISA. Hospital Anxiety and Depression Scale (HADS) and Goldberg Anxiety and Depression Scale were applied to the IBS patients and HC, at baseline. RESULTS: 15 D-IBS patients and 10 HC were included to the study. We observed a significant increased of IL-6 level in plasma of D-IBS compared to HC group (D-IBS: 2.988 (SD 0.9269); HC: 1.119 (SD 0.2723) pg/ml; $p = 0.0342$). The mast cell number trends to be increased in lamina propria of ileum, but not in colon, in D-IBS patients. D-IBS patients showed an elevated anxiety scored (81,8%), but not depression, by both HADS and Goldberg Scale. CONCLUSION: Our results indicated that an elevated inflammatory response is related to anxiety symptoms in IBS Chilean patients. However to reach significant differences in mast cell count is necessary to increase the number of subjects in both groups.

CONGRESS CONBINED EPC & IAP MEETING – INGLATERRA, LONDRES

WHY CHRONIC PANCREATITIS IS RARE IN CHILE?

Berger Zoltán, Mancilla Carla, Watkins Guillermo 1.

INTRODUCTION: Chronic pancreatitis (CP) is considered a rare disease in several Latin-American countries. Genetic factors and dietary habits do not explain this observation. Our experience of 20 years was analyzed in order to describe characteristics of

Chilean patients. To search for differences as compared to other countries. PATIENTS AND METHODS: All patients were evaluated by one of the members of our group. Morphological proof of diagnosis (calcifications/calculi, alterations of ducts, local complication or histology) was obtained in every patient. History of acute pancreatitis was recorded, exocrine-endocrine function assessed. Medical records were retrospectively analyzed. RESULTS: 105 patients suffering CP were identified: 75 males and 30 females. The number of cases diagnosed per 5 years period increased markedly, from 6 to 36. Pancreatic calcification was seen in 84, calcification became evident during the follow-up in 6 of 21 originally no calcified forms. Severe pain or local complications occurred in 26 patients, requiring surgery (9) or endoscopic treatment (17). 47 patients were free of symptoms. Exocrine (58) and endocrine (50) insufficiency was demonstrated and treated. Alcoholic etiology was evident in no more than half of the patients, only 28 consumed more than 80g alcohol/day. During the follow-up, 13 patients died, 3 of them due to diabetes complications, the other for unrelated causes. CONCLUSIONS: Frequently asymptomatic CP patients rarely consult gastroenterologists. Late diagnosis is common: most of our patients presented advanced CP. Even when CP is increasingly diagnosed in our hospitals, the number of cases still remains far less compared to other countries. Underdiagnosis does exist but it cannot explain this difference by itself.

EASL THE INTERNATIONAL LIVER CONGRESS 2014 – LONDRES, INGLATERRA

RS12979860 IL28B GENOTYPE IS ASSOCIATED WITH ADVANCED FIBROSIS IN HCV GENOTYPE 1-INFECTED EUROPEAN PATIENTS WITH CHRONIC HEPATITIS C: RESULTS FROM THE INTERNATIONAL GEN-C STUDY

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Background and Aims: Host IL28B genotype influences spontaneous clearance of acute HCV infection and response to interferon-based treatment in patients with chronic hepatitis C (CHC). Whether IL28B genotype influences progression of hepatic fibrosis is unclear. The large prospective international Gen-C study was designed to evaluate relationships between IL28B Genotypes and fibrosis stage in patients with CHC. Methods: In this analysis of data from treatment-naïve HCV genotype (G)1-infected Caucasian patients without autoimmune disease, associations between patient characteristics and IL28B rs12979860 genotype were explored by multiple logistic regression (MLR) analysis. A diagnosis of cirrhosis or transition to cirrhosis was made, at the discretion of the investigator, by biopsy or non-invasive method. Results: Among 1147 patients, enrolled from 15 European countries, 53% were male, the mean age was 47 (\pm 13) years, 32% (n=366) had a CC genotype, 53% (n=613) had a CT genotype and 15% (n=168) had a TT genotype. Baseline fibrosis assessment (biopsy or non-invasive) was available for 1099 (95.8%) patients. Among patients with IL28B CC, CT and TT genotypes, 20% (69/348), 25% (145/592) and 33% (53/159), respectively, had cirrhosis/transition to fibrosis (Cochran-Armitage trend test $p=0.0014$). FibroScan values (n=507) had a significant association with IL28B (mean score: CC 9.49; CT 10.3; TT 12.7kPa; Cochran-Armitage trend test $p=0.0224$). Factors significantly associated with cirrhosis/transition to cirrhosis in the final MLR model are shown in the table. Factors included in the backward elimination procedure (p -value = 0.05 to remain in model): IL28B, age, gender, body weight, BMI, HCV RNA, years since HCV infection, ALT ratio, AST ratio, platelets, current regular alcohol use (yes/no), drug use (other/never). * $p=0.0163$ for selection of IL28B (Wald Chi-Square test with two degrees of freedom). Conclusions: This analysis demonstrates that rs12979860 IL28B genotype is significantly associated with advanced fibrosis in European patients with HCV G1 infection after adjustment for other prognostic factors.

GERIATRÍA

CONGRESS OF INTERNATIONAL SOCIETY OF GERIATRIC ONCOLOGY (SIOG) – LISBOA, PORTUGAL

QUALITY OF LIFE OF ELDERLY CANCER PATIENTS IN CHILE

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Introduction: Quality of life has become one of the most relevant outcomes in cancer patients. The identification of relevant items affecting patients is a relevant tool for defining a more appropriate treatment for individuals. Objectives: Characterize a sample of elderly Chilean patients at a comprehensive cancer center. Identify variables that could be relevant for targeted interventions. Methods: Descriptive study of a non-intentioned sample. Period: 2014. Ambulatory and hospitalized patients older than 65 years of a Chilean comprehensive non-profit cancer center. Data: sociodemographic variables, and disease specific items were explored. Comorbidity was evaluated with the Charlson Comorbidity Index. QOL instruments: Spanish validated versions of EORTC C30 and ELD14 modules. All patients signed and submitted an informed consent. All data were discharged to an excel file and analyzed using Stata12. P values ≤ 0.05 were considered statistically significant. Results: General variables: Sixty three patients participated in the study. Age average

was 69.6 years (± 7.1), forty one percent were male. Fifty seven percent were married, 12 percent single, 18% widowed 7% divorced, and 7% single with a couple. Patients lived with a median of three relatives and 20% lived alone. A 44.4% were still working. More than 61% had at least 12 years of studies. Disease variables: Patients had a 3.8 average comorbidity score. There was a wide spread of neoplastic diagnoses: 17.7% had diagnosis colon cancer, 14.5% had gastric/esophageal cancer, 12.9% hepatobiliary, 9.7% head and neck, 8.1% gyn, 9.7% breast, 9.7% hematologic, 6.5% prostate and 11.3% other locations. Sixty five percent were treated with a curative purpose. Only 50% knew their cancer stage being 2.5% in situ, 5.1% Stage I, 15.4% Stage II, 20.51% Stage III and 56.41% Stage IV. The most used treatment was chemotherapy, alone (26.7%), with radiotherapy (8.3%), surgery (30%) or with other therapies (11.7%). QOL results: Median physical function was 87, emotional 83, role functioning 100, cognition 83, social functioning 83 points, tiredness 33, pain 17, and global QOL 75 points. Median mobility score was 89, care for others 50, own care 33, purpose 67, disease burden 33, and family support 67 points. There were no differences between genders in quality of life measures (Mann Whitney and Kruskal Wallis) except that men had better mobility than women. ($p < 0.01$). There were no clinical and demographic differences between genders. C30 scores showed better scores for men in physical functioning, less tiredness, women had more loss of appetite and nausea ($p < 0.01$). Conclusion: Quality of life is a relevant topic and should be incorporated in all evaluation of elderly cancer patients. Elderly patients showed high QOL scores showing a good adaptation to disease. Family plays an essential role in the well being of patients.

UNIDAD DEL DOLOR

15TH WORLD CONGRESS ON PAIN - BUENOS AIRES, ARGENTINA

PREVALENCE OF CHRONIC NON CANCER PAIN IN CHILE.

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Aim of Investigation: To estimate the prevalence and the impact of chronic non-cancer pain in Chile. Methods: We designed an instrument based on European Survey of Pain, Pain Survey U.S. Population, Canadian Chronic Pain Survey and Survey of Pain Prevalence Study of the Latin American Federation of Pain. We estimated a sample size of 784 people for to estimate prevalence of chronic non-cancer pain, with a maximum variability (50% for chronic non-cancer pain prevalence), with confidence level of 95% and estimation error of 3.5%. Finally, a cross-sectional cellphone survey was conducted on a nationally representative probability sample of 865 subjects, over 18 years old, in November 2013. The prevalence of chronic non-cancer pain was estimated using expansion factors according national projections, by age group and gender, from Instituto Nacional de Estadísticas (INE) for year 2010. Results: The estimated prevalence of chronic non-cancer pain was 32.1% (CI 95%: 32.09 - 32.20), significantly higher in women (35.9%) and increasing by 1.4% for every year of age. The respondents with chronic non-cancer pain showed: 64.5% had moderate pain (VAS: 4-6) and 23.4% had severe pain (VAS: 7-10). 63.8% had somatic pain, 30.3% neuropathic pain and 3.5% visceral pain. 70.2% reported taking any pharmacological treatment for pain with some frequency. In 71.9% of cases, a physician prescribed medication. The prevalence of labor leave was 26.2% with a median duration of 14 days (IQR: 14, Range: 1 - 60). Conclusions: These figures provide the first measurement of chronic non-cancer pain in Chilean population, revealing its impact as a public health problem, given the high prevalence found and high private and social costs involved.