

El material que se presenta a continuación proviene de los datos proporcionados por la OAIC (Oficina de Apoyo a la Investigación Clínica de nuestro Hospital).

Abstracts de publicaciones nacionales ISI 2011

DEPARTAMENTO DE CARDIOLOGÍA

REV MED CHILE 2011; 139: 1192-1195

HEMATOMA SUBCAPSULAR ESPLÉNICO EN PACIENTE PORTADOR DE RASGO FALCIFORME

Diego Ugalde, Guillermo Conte, Héctor Ugalde, Gastón Figueroa, Marianela Cuneo, Macarena Muñoz, Javiera Mayor

Drepanocytic anemia is an uncommon hereditary disease in Chile. The heterozygous state of drepanocytic anemia or "sickle trait" has a frequency of 8% among Afro-Americans. A small number of patients carrying hemoglobin S are homozygous, with clinical manifestations of hemolytic anemia and thrombotic disease. Sickle trait is usually asymptomatic. We report a 59-year-old male who presented an acute abdominal pain and dyspnea while staying at high altitude. Six days later, an angio CAT scan showed the presence of a subcapsular splenic hematoma that was managed conservatively. Sickle cell induction with sodium metabisulphite was positive. Hemoglobin electrophoresis confirmed the sickle trait.

REV MED CHILE 2011; 139: 717-724

ATEROSCLEROSIS EN SUJETOS CON PERIODONTITIS

Néstor J. López, Adriana Chamorro, Marcelo Llancaqueo

Background: Chronic inflammation and infections are involved in the development and progression of atherosclerotic vascular disease. Aim: To evaluate the association between periodontitis and early atherosclerosis. Material and Methods: Fifty-three subjects who received periodontal treatment and regular maintenance for at least 10 years, and 55 subjects with periodontitis but without a history of periodontal treatment were studied. Carotid artery intima-media wall thickness (CIMT) was measured with high-resolution B-mode ultrasonography. A blood sample was obtained to measure high sensitivity C-reactive protein, fibrinogen, lipoprotein cholesterol, leukocyte count and erythrocyte sedimentation rate. Covariates included age, gender, smoking, level of education, body mass index and physical activity. The benzoyl-DL-arginine-naphthylamide (BANA) test was used to determine the number of periodontal sites with periodontal pathogens. Results: CIMT value was significantly higher in subjects with periodontitis than those without it (0.775 ± 0.268 and 0.683 ± 0.131 mm respectively, $p = 0.027$). C-reactive protein, leukocyte count and percentage of sites with periodontal pathogens were also significantly higher in subjects with periodontitis. Regression analysis identified age, periodontitis, and smoking as independent predictors of CIMT. Conclusions: These results suggest that untreated periodontitis is associated with early atherosclerotic carotid lesions and higher levels of inflammatory markers.

REV. MED. CHILE, 2011, VOL.139, N.11, PP. 1396-1402.

ANGIOPLASTY COMPARED TO THROMBOLYSIS AS THE INITIAL REPERFUSION THERAPY IN ACUTE MYOCARDIAL INFARCTION.

Ugalde Héctor; Ugalde, Diego y Muñoz, Macarena.

Background: Primary angioplasty is superior to intravenous thrombolysis as reperfusion therapy for acute myocardial infarction. Aim: To compare the results of available reperfusion strategies for initial management of acute myocardial infarction during hospitalization and 5 years follow up. Patients and Methods: Historical cohort study from a prospective registry of patients admitted with acute myocardial infarction to our center. Patients treated with primary angioplasty were identified and were then matched by age, sex and date of event with patients treated with thrombolysis. The clinical outcomes were compared including hospitalization and 5-years follow-up. Results: From March 1993 to August 2001, 98 patients were treated with primary angioplasty and matched with 98 thrombolysed patients. The groups were comparable. Compared to thrombolysis, angioplasty had a higher success rate (68 and 91% respectively), resulted in less complications and reduced mortality (11 and 2% respectively), required less revascularization procedures and shorter hospital stay (17 and 13 days, respectively). During the follow-up of survivors, no differences in events or additional mortality were detected at 1 or 5 years. Conclusions: Primary angioplasty is superior as treatment in terms of achieving success and reducing mortality during hospitalization. Evolution after hospitalization is independent of initial therapy.

DEPARTAMENTO DE MEDICINA

GASTROENTEROLOGÍA

REV. MÉD. CHILE 2011; 139: 587-591.

ENFERMEDAD CELÍACA SILENTE EN EPILEPSIA CRIPTOGENICA DEL ADULTO

Ana María Madrid S., Mario Díaz S., Carmen Hurtado H., Ledda Aguilera O., Boris Mena U.

Background: Celiac disease (CD) is predominant in women and young people. Atypical, non-enteric symptoms are more common among adults. There is also an association between CD and neurological disorders, especially with cerebellar ataxia, polyneuropathy and epilepsy. Aim: To study the frequency of CD in a group of adults with cryptogenic epilepsy. Material and Methods: Twenty one patients with cryptogenic epilepsy, aged 20 to 65 years (14 women) were studied, measuring IgA-anti transglutaminase antibodies and deamidated gliadin peptide (DGP) IgG and IgA antibodies. Results: One patient had elevated titers of both types of antibodies. Small bowel biopsy showed villous atrophy and lymphocytic infiltration compatible with CD. Conclusions: One of 21 adult patients with cryptogenic epilepsy had a silent CD.

REV MED CHILE 2011; 139: 704-709

RESULTADOS DEL TRATAMIENTO CON PEGINTERFERÓN ALFA-2A Y RIBAVIRINA EN PACIENTES CON HEPATITIS CRÓNICA C

Carolina Pizarro, Mauricio Venegas, Karen Hola, Gladys Smok, Javier Brahm

Background: The current treatment recommendation for chronic hepatitis C virus infection is the combination of peginterferon and ribavirin for 24 or 48 weeks, depending on the viral genotype. The aim of the therapy is to obtain a sustained virological response. Aim: To report our experience in the treatment of chronic hepatitis C. Material and Methods: Analysis of 52 patients treated between September 2000 and June 2009. Patients with genotype 1 or 5 were treated with peginterferon alpha 2a (180 ug/week) and ribavirin (1000 mg/day for those weighing less than 75 kg and 1200 mg/day for those weighing more than 75 kg) during 48 weeks. Patients with genotypes 2 and 3 were treated for 24 weeks with the same dose of peginterferon and ribavirin 800 mg/day. Results: Viral genotypes 1, 2, 3 and 5 were present in 81, 4, 11 and 4% of patients, respectively. Twenty four patients (46 %), 18 with genotype 1, achieved a sustained viral response. Age was the only variable that influenced the response to treatment. Conclusions: Approximately half of the patients with chronic hepatitis C, achieve a sustained viral response with peginterferon and ribavirin.

REV MED CHILE 2011; 139: 794-801

MYCOBACTERIUM AVIUM SUBSP PARATUBERCULOSIS Y ENFERMEDAD DE CROHN: EVIDENCIAS DE UNA ZONOSIS

Patricio Retamal M., Caroll Beltrán M., Pedro Abalos P., Rodrigo Quera P., Marcela Hermoso R.

Paratuberculosis is a chronic intestinal disease of animals caused by *Mycobacterium avium* subsp. *paratuberculosis* (MAP), which has some pathological features similar to Crohn's disease (CD) in humans. The presence of MAP in food for human consumption and in affected tissues of patients with CD has been detected. Therefore, a causal association between this microorganism and the disease in humans, has been postulated. However, several related studies have failed to confirm this hypothesis and the scientific acceptance of MAP as a zoonotic agent remains controversial. This review presents the main findings related to this issue, contrasting evidences for and against an association between MAP and CD. The need to promote national studies focusing on this area is suggested.

GENÉTICA

REV MED CHILE 2010; 138: 1530-1534

CÁNCER HEREDITARIO DE COLON: APORTES DEL DIAGNÓSTICO GENÉTICO MOLECULAR

Teresa Aravena, Cristóbal Passalacqua, Silvia Castillo

Background: About 30% of cases of colon cancer (CC) have a family history of CC, and only 5% are hereditary forms. Hereditary forms have an increased risk of CC and other tumors. Aim: To report the molecular and genetic study in two families with hereditary CC. Material and Methods: Molecular analysis of the adenomatous polyposis coli (APC) gene of familial adenomatous polyposis (FAP), was done in a patient with multiple benign polyps and his children. Molecular analysis was performed for MLH1 gene mutation of hereditary non-polyposis colon cancer (HNPCC) in an asymptomatic patient with family history of multiple cancers and his mother with a confirmed mutation in the MLH1 gene. Results: The patient with FAP had an insertion of 17 base pairs in exon 9 of the APC gene and two of his children had the same mutation. The patient with history of HNPCC did not have the family mutation on MLH1. Conclusions: In the case of FAP, molecular study was performed in his children since manifestations in carriers of the mutation may begin in childhood. If the second patient would have had the mutation, the study of his children could have been postponed until the age of 18, when the risk for CC is increased.

HEMATOLOGÍA

REV MED CHILE 2011; 139: 357-361

HEMOFILIA ADQUIRIDA TRATADA CON ANTI CD20, UN ANTICUERPO ANTI LINFOCITO B

Guillermo Conte L., Gastón Figueroa M., Paola Aravena R., Néstor González G., Daniel Araos H., Marianela Cuneo V.

We report a 54-year-old male presenting with a history of recurrent nose bleeds and ecchymoses. The coagulation study showed a prolonged partial thromboplastin time, a factor VIII of 8% and a high inhibitor titer (193 Bethesda units). A diagnosis of acquired hemophilia A was reached. The patient was initially treated with cyclophosphamide for seven months without response. Therefore rituximab in doses of 375 mg/m²/week for four weeks was started. After starting treatment, the patient had a hematoma in the psoas muscle with a concomitant factor VIII of less than 5%, that was treated with local measures. Thereafter, a progressive reduction in inhibitor titers was observed, until its disappearance at five months of treatment. Factor VIII levels normalized and the patient has not experienced abnormal bleeding episodes. The patient remains in remission after 67 months of follow up. Rituximab, a chimeric monoclonal antibody against the protein CD 20 is an effective treatment in acquired hemophilia A.

INFECTOLOGÍA

REV CHIL INFECT 2011; 28(2): 130-151

ACTUALIZACIÓN DEL CONSENSO "NEUMONÍA ASOCIADA A VENTILACIÓN MECÁNICA" PRIMERA PARTE. ASPECTOS DIAGNÓSTICOS

Alberto Fica C, Marcela Cifuentes D. y Béatrice Hervé E.

The best strategy to resolve the diagnosis of ventilator-associated pneumonia (VAP) is unsettled, and periodic reviews of new evidence are necessary. An update was performed to renew the 2001 recommendations on the diagnosis of this condition by

The Chilean Society of Infectious Diseases. The main proposals are: to incorporate a microbiology-based strategy when there is a suspicion of VAP to gather local epidemiologic data and design appropriate empirical therapy for next cases, and to apply a non-invasive approach such as an endotracheal aspirate or mini-bronchoalveolar lavage, to facilitate accessibility and lower costs. There is no advantage on survival using either quantitative or qualitative cultures for VAP and a definite recommendation cannot be issued. Nonetheless, quantitative cultures are more specific and could facilitate to reject the diagnosis, look for other alternatives, and avoid unnecessary antibiotics. Biomarkers to assist VAP diagnosis are not recommended due to their poor performance. However, serial procalcitonin determinations have been useful to decrease antibiotic use in critical care patients and this biomarker has a better diagnostic yield than C reactive protein in this setting. This consensus also recommends discriminating VAP from ventilator-associated tracheobronchitis (VAT). The latter represents a separate entity characterized by an inflammatory response with purulent tracheal secretions but without new pulmonary infiltrates. Although preliminary data supports a beneficial effect of antibiotics to treat this condition, evidence is limited yet, and both conditions deserve to be discriminated (VAP versus VAT).

REV CHIL INFECT 2011; 28 (4): 343-348

ETIOLOGÍA DE LA NEUMONÍA EN PACIENTES CHILENOS INFECTADOS POR EL VIRUS DE LA INMUNODEFICIENCIA HUMANA

Carlos Pérez C., Patricia García C., Mario Calvo A., Jaime Labarca L., Marisol Bustos M., Teresa Beroiza W., Pablo Gaete G., Rodrigo Moreno B., Guillermo Acuña L. y Pablo Vial C.

Objectives: To establish the etiology of pneumonia and to compare the yield of diagnostic techniques for diagnosis of *Pneumocystis jiroveci* and *Mycobacterium tuberculosis* infections in HIV-1-infected patients. Patients and Methods: Subjects underwent sputum induction and bronchoalveolar lavage (BAL). Gram, Ziehl-Neelsen, silver stain (SS) and immunofluorescence staining (IF) for *P. jiroveci*, fluorescent stain for mycobacteria, PCR for *P. jiroveci* and *M. tuberculosis*, aerobic, fungal and mycobacterial cultures, respiratory viruses and CMV cultures were performed on the sputum and BAL. IgM for *Mycoplasma pneumoniae* and *Chlamydia pneumoniae*, and *Legionella pneumophila* urinary antigen were also obtained. Results: Sixty patients were included. An etiologic diagnosis was made in 97%. *Pneumocystis jiroveci* was the most frequent etiology (58%) followed by *Streptococcus pneumoniae* (12%), and *Mycobacterium avium* complex (12%). *Mycobacterium tuberculosis* was found in 5%. Conclusions: The comparison of diagnostic methods for *P. jiroveci* showed a higher sensitivity of IF and SS in BAL than in sputum, however PCR was equally sensitive in both samples. With this approach a precise etiologic diagnosis was reached in the great majority of patients. The most common etiology was *P. jiroveci*. IF in BAL remains the gold standard for diagnosis of *P. jiroveci* pneumonia.

REV CHIL INFECT 2011; 28 (4): 316-332

ACTUALIZACIÓN CONSENSO NEUMONÍA ASOCIADA A VENTILACIÓN MECÁNICA. SEGUNDA PARTE. PREVENCIÓN

Mario Calvo A., Luis Delpiano M., Eliana Chacón V., M. Irene Jemenao P., Anamaría Peña D. y Alejandra Zambrano G.

Ventilator associated pneumonia is a life threatening disease, in spite of advances in its treatment, consequently the development of prevention strategies is a key factor in improving the morbidity and mortality in intensive care units (ICU). The new developments in this field in the last years led to the need to update the recommendations done in 2001. Then, a new search and analysis of scientific literature was performed. The obtained data support different strategies highlighting: semi-recumbent position at 45° of patients; incorporation of routinely oral hygiene procedures with chlorhexidine; preference of orotracheal intubation; performing subglottic aspiration; use of standard hand hygiene techniques; not routine change of ventilator circuits; and defining bundles to organize the work at ICU. Some strategies were recommended for being of similar efficacy to others but cost-effective as: use of heat and moisture humidifiers; and changing humidifiers every 5 to 7 days. The use of open or closed endotracheal suctioning system does not affect the incidence of pneumonia. Some recommendations were not incorporated because of lack of evidence supporting effectiveness, controversial data or doubtful application to our country as selective digestive decontamination.

REV CHIL INFECT 2011; 28(1): 14-18

CALIDAD MICROBIOLÓGICA DEL AIRE DE UNA UNIDAD DE PREPARADOS FARMACÉUTICOS ESTÉRILES

Beatriz Caorsi P., Andrea Sakurada Z., M. Teresa Ulloa F., Marcela Pezzani V. y Paz Latorre O.

Introducción: La elaboración de preparados farmacéuticos estériles requiere áreas limpias que deben cumplir estándares internacionales para minimizar la contaminación microbiana. Objetivo: Evaluar la calidad bacteriológica del aire de la Unidad

de Preparados Farmacéuticos Estériles del Servicio de Farmacia del Hospital Clínico de la Universidad de Chile y establecer niveles de alerta y acción. Material y Métodos: Se monitorearon ocho puntos representativos de la unidad, diariamente entre enero y febrero de 2005 y bisemanalmente de junio a febrero de 2006. Se estudiaron 839 muestras de aire, recolectadas mediante el método de impacto en placa (equipo MAS-100). Resultados: De las muestras estudiadas, 474 (56,5%) fueron positivas; de éstas, sólo 17 (3,5%) estuvieron fuera del rango permitido, porcentaje que representa el 2% del total. Las muestras de los sitios 1 y 2 (flujo laminar grande y pequeño), que corresponden al área de preparación de preparados estériles fueron negativas. Los sitios 3 (mesón) y 4 (transfer) presentaron ocasionalmente valores superiores a los límites. Los microorganismos más frecuentes fueron *Staphylococcus coagulasa negativa*, *Micrococcus spp* y *Corynebacterium spp*, agentes de la microbiota de la piel y, menor porcentaje, *Bacillus spp*, agente de la microbiota ambiental. Conclusiones: Desde el punto de vista microbiológico, la calidad del aire de la zona de preparaciones estériles descrita presenta niveles ajustados a estándares internacionales. El establecer niveles de alerta y acción institucionales y la identificación de los microorganismos obtenidos en las áreas más sensibles de la unidad permite cuantificar la carga microbiana y conocer sus componentes para determinar las intervenciones a realizar cuando ellas estén indicadas.

REV CHIL INFECT 2011; 28(1): 19-27

RESULTADOS DE LA VIGILANCIA DE SUSCEPTIBILIDAD ANTIMICROBIANA EN CHILE: CONSOLIDANDO UNA RED

Francisco Silva O., Marcela Cifuentes D. y M. Eugenia Pinto C.

La resistencia antimicrobiana es un problema de salud pública en aumento. La generación de redes de vigilancia es una necesidad para la correcta comprensión y seguimiento de este fenómeno, además de ayudar a orientar las medidas para el control de su aparición y diseminación. En Chile, desde el año 2007 se constituyó un grupo colaborativo de resistencia antimicrobiana de centros de salud de varias regiones, que ha generado información respecto a la frecuencia de resistencia antimicrobiana de distintas especies bacterianas. En este artículo se presentan los resultados de la vigilancia del año 2009, con énfasis en su interpretación, limitaciones y perspectivas a futuro.

INMUNOLOGÍA

REV CHIL INFECT 2011; 28 (5): 461-469

RESISTENCIA A LA TERAPIA ANTIRETROVIRAL EN LA INFECCIÓN POR VIRUS DE INMUNODEFICIENCIA HUMANA

Alejandro Afani S. y Ana M. Gallardo O.

Resistance to anti-retroviral therapy is one of the main problems in the favorable outcome of treatment in HIV patients, as well as toxicity and adherence to treatment. Resistance has increased in recent years, and it is evaluated through genotyping and phenotypic tests. Information provided by these studies is crucial when deciding the most appropriate treatment. However, genotype interpretation is complex and subject to frequent change, because of the incorporation of new drugs and the appearance of new resistance patterns. This review aims ,understanding the fundamental concepts of antiretroviral resistance (ARV), which examines the general principles, mechanisms and patterns of resistance, both for the traditional family of anti-retrovirals, as well as for the most recently licensed drugs.

MEDICINA INTERNA

REV MED CHILE 2011; 139: 348-352

SÍNDROME DE TAKO-TSUBO: CASO CLÍNICO

Carlos M. Rau, Max Kauffmann, Carlos L. Rau, Mauricio Cereceda, Gabriel Castro, Teresa Massardo

Tako-Tsubo syndrome resembles an acute myocardial infarction in symptoms, laboratory parameters and electrocardiographic changes. However, angiography does not show evidence of coronary occlusion, and typically an apical ballooning of the ventricle in systole is observed. We report a 78-year-old woman with no coronary risks factors, admitted to the emergency room due to acute chestpain and an electrocardiogram compatible with an acute coronary syndrome with ST elevation. Serum troponin and creatin-kinase (MB fraction) were elevated. An emergency coronary angiography did not show a coronary occlusion. Due to the apical ballooning observed in the left ventriculography, probable diagnosis of Tako-Tsubo was proposed.

The patient had a favorable evolution. A treadmill test, echocardiogram and myocardial perfusión SPECT, performed one month later, disclosed no abnormalities.

REV MED CHILE 2011; 139: 1081-1088.

DEFINICIÓN ACTUAL DE LA MEDICINA INTERNA Y EL INTERNISTA

Luz M. Letelier S. 1, Andrés Valdivieso D.2, Raimundo Gazitúa P.3, Sylvia Echávarri V.1,4,5, Rodolfo Armas M.6

Internal Medicine is a basic clinical specialty in Medicine, but due to its vast field of action it is quite difficult to define. This consensus article analyzes different definitions and proposes a current definition while analyzing several aspects of the specialty along with its strengths and weaknesses. We propose to define Internal Medicine as a clinical specialty devoted to the comprehensive care of adults, from adolescence to senility, particularly the diagnosis and non surgical treatment as well as primary and secondary prevention of their diseases, in hospital or ambulatory settings. We propose to define Internal Medicine as a clinical specialty devoted to the comprehensive care of adults in hospital or ambulatory settings, from adolescence to end of life, in terms of prevention, diagnosis and non-surgical treatments of disease.

ONCOLOGÍA

REV. CHILENA DE CIRUGÍA. VOL 63 -Nº 2, ABRIL 2011; PÁG. 147-153

REGISTRO DE EVALUACIÓN DE TRATAMIENTO DE CÁNCER GÁSTRICO EN CHILE (REGATE): CARACTERÍSTICAS CLÍNICAS BÁSALES DE 523 PACIENTES

Bettina Müller, Hernán De La Fuente H., Olga Barajas B., Bernardita Cardemil J., Antonio Vila T., Eduardo Mordojovich S., Karina Peña N. César Castillo C., Mónica Campos M., Hernán Rojas R., Ingrid Quijada P., Cristián Yáñez R.

Background: Gastric cancer is one of the leading causes of cancer-related deaths in Chile and worldwide. No consensus exists for therapeutic management. Aim: To assess clinical features and practice patterns of patients with newly diagnosed gastric cancer in Chile. Method: Chilean patients > 18 years old with newly diagnosed primary gastric adenocarcinoma enrolled by thirteen centers from different regions of Chile. Target sample size calculated according to gastric cancer prevalence in Chile. Data collected from two visits within a 10-month timeframe: baseline (patients and tumor features, treatment plan) and end of study (completion of initial treatment). Herein, baseline visit data is presented. Results: Between 2005 and 2008, 523 patients enrolled. Median age 61.3 years. Diagnosis by endoscopy in 98.5% patients. Location: body 35.8%, proximal 35.4%, and antral 23.9%. Most frequently used histopathological classification was WHO classification, with tubular adenocarcinoma being most frequent finding (53.1%). AJCC/UICC clinical staging (available in 31.1% of patients) was: 0 and I - 23.3%, II - 18.3%, III- 20.8%, IV - 37.6%. Therapeutic choice based mainly on clinical staging (49.9%) and included surgery in 440 patients (84.1%). Therapy planned by surgeon (54.9%) or multidisciplinary team (42.3%). Conclusions: REGATE is the largest prospective multicenter registry study performed in Chile. Basal visit data report that diagnosis is established frequently at advanced stages. Surgery is the most frequent therapeutic choice, (neo-) adjuvant therapies are only planned in one out of four patients. End of study visit data will provide the full scope of diagnosis and treatment of these patients.

NEFROLOGIA

REV MED CHILE 2011; 139: 955-958

NERUDA Y LA RESISTENCIA A LOS ANTIBIÓTICOS

Alejandro Cotera

Antimicrobial resistance has been a problem in medicine, since their incorporation to clinical practice. Numerous papers have been written on the subject. The analysis of two poems by Pablo Neruda "How much does a man live" and "Larynx", included in the volume "Estravagario" and published for the first time in 1957 and 1958, give us an incredible revelation about the concept of resistance. In these poems aureomycin, the first antimicrobial of the family of tetracycline's, was included as a poetic figure and the therapeutic action of antimicrobials was described. "Never so much bugs died I tons of them fell I but the few that remained olive I manifested their perversity". These writings incorporated novel concepts, even for physicians of that time and described the closeness of death that a patient may perceive during the course of a given disease. The capacity of Pablo Neruda to extract the essence of situations and to anticipate to conditions that only years later became clinically relevant problems, is noteworthy.

DEPARTAMENTO DE CIRUGÍA

REV. CHILENA DE CIRUGÍA. VOL 63 - Nº1, FEBRERO 2011; PÁG. 110-113

MICROENCAPSULACIÓN DE CÉLULAS Y TEJIDO PARA TERAPIA CELULAR

Patricio Cabané T, Andrés Alvo V., Andrónico Neira-Carrillo, Pablo Caviedes F., Patricio Gac E.

Microencapsulation is a technique that protects viable cells in semi-permeable membranes, which allow passage of essential molecules while stopping larger molecules, such as antibodies, involved in the death of transplanted cells. This allows the avoidance of immunosuppressive drugs. Several substances have been used for this purpose, and alginate is one of the most studied and validated. Alginate is extracted from algae present in African and Chilean coasts; different algae can be mixed in variable proportions to produce alginate with distinct characteristics. Commercial alginate evokes an inflammatory response that results in the death of transplanted cells. High purity alginate has already been developed to avoid this issue. There are several applications to this technique, as there are a large number of pathologies that result from the destruction or extraction of tissues, with the consequent loss of function (diabetes mellitus or post-surgical hypoparathyroidism, for example). Finally, there is an additional interest in alginate microencapsulation in this country, given that it can be easily obtained from national algae.

REV. CHILENA DE CIRUGÍA. VOL 63 - Nº 4, AGOSTO 2011; PÁG. 415-417

LARINGOCELE COMO DIAGNÓSTICO DIFERENCIAL DE QUISTE TIROIDEO.

Patricio Cabané T., Patricio Gac E., Int. Andrés Alvo V., Daniel Roizblatt K., Laura Carreño T.

A cervical mass is a usual complaint within the clinical practice. Among possible causes, thyroid cysts and nodules are frequent findings. However, there are differential diagnoses that arise from neighboring structures, which can be difficult to assess. We report an 18 years old male presenting with a cervical mass, clinically and ecographically suggestive of a right thyroid cyst. Fine needle aspiration was negative for neoplastic cells. Within surgery a paratracheal lesion was identified and resected. The histological findings were compatible with a laryngocele. A laryngocele is an abnormal dilatation of the laryngeal sacule that can simulate a thyroid cyst. Computerized tomography and magnetic resonance are of great importance in its diagnosis, but sometimes is found within surgery or in the anatomopathologic study.

REV. CHILENA DE CIRUGÍA. VOL 63 - Nº 2, ABRIL 2011; PÁG. 170-177

CORRELACIÓN ECOGRÁFICA-LAPAROSCÓPICA EN COLECISTITIS CRÓNICA Y AGUDA. VALIDACIÓN 10 AÑOS DESPUÉS

Italo Braghetto M., Jaime Jans B., Andrés Marambio G., José Lasen D., Rubén Miranda T., Leonor Moyano S., Attila Csendes J., Andrés Rojas P., Álvaro Sanhueza S.

Introduction: Abdominal ultrasound is the initial diagnosis tool for gallbladder disease and laparoscopic surgery is the gold standard approach. The aim of this study was to validate 10 years after, the ultrasonographic and laparoscopic findings previously proposed by our team to forecast laparoscopic cholecystectomy in terms of difficulties and perioperative complications. Materials and Methods: We evaluated 336 patients operated by laparoscopy between June and December 2007 in our center. Ultrasound findings were classified according to the classification proposed in 1997 based on the thickness of the gallbladder wall, lumen and the presence of gallstones or sonic shadow. Results: Type I and IIA cholecystitis had a lower percentage of intraoperative difficulties (14.9 and 32.8% respectively) and conversion to open surgery (1.1 vs 1.7% respectively), whereas type LIB and III were associated greater presence of difficulties (51.3% and 71.4% respectively) and conversion rate (9.2% and 23.8% respectively). Conclusions: this classification is a useful tool in the correlation of ultrasonographic and laparoscopic findings in acute and chronic cholecystitis, helping the surgeon in predicting surgical problems, complications and risk of conversion to open surgery and supports the results previously published.

REV CHIL CIR [ONLINE]. 2011, VOL.63, N.3, PP. 262-269

ANÁLISIS CRÍTICO DE GUÍA CLÍNICA GES GRAN QUEMADO VERSIÓN 2007

Danilla E Stefan, Norambuena B Hernán, Searle F Susana, Fuentes F Patricio, Castillo D Paulo, Feres W Marcelo et al.

Objetivo: Evaluar críticamente la guía de práctica clínica (GPC) de Gran Quemado correspondiente a las Garantías Explícitas en Salud (GES) versión 2007. Material y Método: La evaluación se realizó con el instrumento AGREE el cual

ha sido previamente validado. El instrumento AGREE evalúa una serie de ítems en 6 dominios entregando un puntaje específico que se compara con un máximo teórico. Tres autores en forma independiente y enmascarada evaluaron la GPC y puntuaron de acuerdo al instrumento utilizado. Resultados: Estratificando por dominio, en "alcance y objetivo" se obtuvo un 88,9% de cumplimiento; en participación de los implicados 47,9%; en rigor en la elaboración 47,6%; en claridad y presentación 79,2%; en aplicabilidad 30,6% y 75% en independencia editorial; entregando un puntaje final de 44,9% de cumplimiento. Conclusiones: El puntaje obtenido fue menor al 50% del óptimo para una GPC. El análisis detallado por dominio entrega en forma detallada las áreas susceptibles de perfeccionar para optimizar la aplicabilidad de la guía clínica y de tal forma garantizar la mejoría en el cuidado y los resultados del tratamiento de los pacientes quemados beneficiarios de las Garantías Explícitas en Salud.

REV. CHILENA DE CIRUGÍA. VOL 63 - N° 3, JUNIO 2011; PÁG. 280-289

MEDICIÓN HISTOLÓGICA MICROMÉTRICA DE CAPA MUSCULAR GÁSTRICA DE PACIENTES OBESOS

Verónica Azabache C.

Background: The measurement of gastric wall thickness is useful during cutting, suturing and stapling surgical procedures. Aim: To measure gastric wall thickness in stomachs excised during bariatric surgery. Material and Methods: Stomachs excised during gastric bypass and sleeve gastrectomy as treatment for obesity was analyzed. The surgical piece was prepared for pathological study in the usual way and the wall thickness was measured in the fundus, body, proximal and distal antrum, using a photographic camera and Scope Photo Software. Results: A sample of 110 stomachs, 45 coming from gastric bypass and 65 from sleeve gastrectomy, was analyzed. Fundus, body, proximal and distal antrum thicknesses were 1.551 ± 514 , 2.072 ± 568 , 2.348 ± 637 and 3.742 ± 967 respectively ($p < 0.0001$). Conclusions: The distal antrum had the higher gastric wall thickness in this series of excised stomachs.

REV. CHILENA DE CIRUGÍA. VOL 63 - N° 3, JUNIO 2011; PÁG. 309-312

EVISCERACIÓN OMENTAL TRANSANAL POSTERIOR A LESIÓN DE RECTO

Marco Albán G., Carlos Jiménez C., Alejandro Acuña Q., Luis Ruiz B., Claudia Lemus R.

Rectal perforation rarely occurs spontaneously. We report a 44 years old male consulting for abdominal pain lasting 12 hours. Abdominal muscular resistance was observed on physical examination. A plain abdominal X ray film showed a pneumoperitoneum. The patient was operated finding a perforation in the lower rectum, with omentum sliding through it and exiting through the anus. The omentum was sectioned and ligated and a derivative colostomy was performed. The cause of the rectal perforation was not ascertained.

REV. CHILENA DE CIRUGÍA. VOL 63 - N°5, OCTUBRE 2011; PÁG. 479-484

CIRUGÍA LAPAROSCÓPICA COLORRECTAL EN CHILE

Francisco López K., Cristóbal Suazo L., Claudio Heine T., Mario Abedrapo M., Rodolfo Avendaño H., Fernando Germain P., Juan Andrés Mansilla E., Ernesto Melkonian T., Rodrigo Migueles C., Misael Ocares U., George Pinedo M., Marcel Sanhueza G.

The development of laparoscopic colorectal surgery began 20 years ago; however it took several years before gaining its acceptance by the international surgical community. The first report in Chile was published in 1995. However, were necessary many years, until the middle of this decade, to know the first prospective series experiences. Out of these reports, no reliable data exist regarding the development of laparoscopic co-lorectal surgery in Chile, related to the number of centers performing laparoscopic colorectal surgery or the number of procedures performed. For record these data, a standardized questionnaire was send to colorectal chairmans of all hospitals that had reported to be developing laparoscopic colorectal surgery in our country. Ten of 15 hospitals responded to the survey. Most of the procedures performed were hemicolectomies, principally for cancer and diverticular disease. The average conversion rate was 7% and hospital stay was 5 days. Morbidity and mortality rates were 12% and 0.4% respectively. In the last year was seen an increase in the number of laparoscopic procedures in relation to the previous period. In conclusion, laparoscopic colorectal surgery is a recent technique in Chile, which is being implemented progressively, with good overall results.

REV. CHILENA DE CIRUGÍA. VOL 63 -N° 2, ABRIL 2011; PÁG. 141-146

ESTUDIO IN VIVO DEL EFECTO ANGIOGÉNICO DE INHIBIDOR DE FOSFODIESTERASA PARA APLICACIÓN POSTERIOR EN INJERTO DERMOEPIDÉRMICO

José Lasen De S., David Lemus P., Susana Benitez L., Carlos Sciaraffia M., Sergio Sepúlveda, Jaime Jans J.

Background: Angiogenesis is a complex process. Phosphodiesterase inhibitors may have a direct angiogenic effect. Aim: To determine if phosphodiesterase inhibitors have angiogenic properties, using a chicken egg model. Material and Methods: We used 44 fertilized chicken eggs. A methylcellulose filter was placed over their allantoconic membrane. This preparation was instilled with different solutions. Group A (Control) received 30 µl of saline solution, Group B, C and D received 30 µl of a solution made of saline solution and sildenafil at different concentrations of 0.33, 1 and 3.3 µg/µl, respectively. At day 12 the filters were removed, prepared for histologic analysis, and the number of capillaries in an area of 2250 µm² were blindly counted. Statistical analysis was made using variance analysis (ANOVA) with Bonferroni technique (p < 0.001). Results: The number of capillaries counted, per 2250 µm², in Groups A, B, C, and D were 11.1 ± 0.5, 15.4 ± 1.2, 16.6 ± 0.8 and 19.2 ± 0.9, respectively. The number of capillaries of groups B, C and D were significantly higher than those of group A (control). Moreover, there was a linear relationship between the number of capillaries and sildenafil dose (p < 0.001). Conclusions: In this experiment, sildenafil had a potent angiogenic effect.

REV. CHILENA DE CIRUGÍA. VOL 63 - N° 5, OCTUBRE 2011; PÁG. 459-467

COLGAJO RADIAL: EXPERIENCIA DEL EQUIPO DE CIRUGÍA PLÁSTICA DE LA UNIVERSIDAD DE CHILE

Patricio Andrades C., María Elsa Calderón G., Stefan Danilla E., Susana Benitez S., Cristian Erazo C., Sergio Sepúlveda.

Background: Radial forearm flap is extraordinarily versatile thanks to its irrigation by the radial artery and its minor pedicles. It provides assorted alternatives for the reconstruction of proximal or distal defects of the arm and can be used as a free flap in head, neck, posterior trunk region, lower limb, esophagus and penis. It allows the incorporation of bone, tendons, nerves and muscle for complex lesion repair. Aim: To report our experience with radial forearm flap. Patients and Methods: Ten patients aged 20 to 65 years (four women) are reported. The lesions repaired were traumatic in four, infectious in three, secondary to tumors in two (a squamous intra oral adenocarcinoma in both patients) and vascular in one patient. Results: No patient had a partial or total loss of the flap. Five patients required complementary dermo epidermic grafts in a second intervention. Mean hospital stay was 30 days. All patients reported a favorable degree of satisfaction with the procedure. Conclusions: Radial forearm flaps are a good alternative for the repair of a great variety of lesions.

REV. CHILENA DE CIRUGÍA. VOL 63 - NO 6, DICIEMBRE 2011; PÁG. 585-590

MORBILIDAD Y MORTALIDAD OPERATORIA DE LA GASTRECTOMÍA SUBTOTAL Y TOTAL POR CÁNCER GÁSTRICO 2004 A 2010. PARTE I DE UN ESTUDIO PROSPECTIVO

Attila Csendes J., Italo Braghetto M., Juan Carlos Díaz J., Jaime Castillo K., Jorge Rojas C., Solange Cortés L.

Background: Surgery for gastric cancer may have high rates of complications and mortality. Aim: To analyze operative mortality of total and subtotal gastrectomy in the period 2004-2010. Material and Methods: Prospective study 345 patients with gastric cancer, mean age 62 years, 64% males, subjected to a total or subtotal R0, R1 or R2 gastrectomy. All patients were assessed in the postoperative period and all complications were recorded. Results: Total and subtotal gastrectomies were performed in 224 and 69 patients respectively. Postoperative complications consisted in anastomotic leaks, duodenal stump leaks, hemoperitoneum, pulmonary infections and intestinal obstruction. Mortality of total gastrectomy R1 or R2 was 2.1% whereas palliative gastrectomy, to improve quality of life, had 15% mortality. Subtotal gastrectomy had 1.4% mortality. Conclusions: There has been a reduction in operative mortality of gastrectomy for gastric cancer, however the rate of complications has not changed.

REV. CHILENA DE CIRUGÍA. VOL 63 - N° 6, DICIEMBRE 2011; PÁG. 617-622

QUISTE SUPRARRENAL PRIMARIO

Patricio Cabané T., Patricio Gac M., Jorge Mariño B., Ints. Daniela Ibacache A., Alejandra Ledezma S., Dra. Claudia Morales H.

Adrenal cyst is the commonest type of benign lesions of adrenal gland, although it is a very rare entity. Typically, they are presented with abdominal pain or palpable mass, but nowadays they are detected most frequently in imaging studies like

incidentaloma. Adrenal Cyst have a broad differential diagnoses, rendering definitive diagnosis and subsequent management difficult. Are categorized into four subtypes: endothelial, pseudocyst, epithelial, and parasitic. This management paradigm may be summarized as: ruling out functional status of the cyst, evaluating chances of incidental malignancy by imaging, avoiding potential complications of surveillance (hemorrhage, infection), particularly in large cysts. A case of a patient with a left non-functioning adrenal cyst is reported, with abdominal pain. The diagnostic and therapeutic options are discussed and the literature is reviewed.

REV MED CHILE 2011; 139: 267-273

MANEJO PALIATIVO DEL CÁNCER DE VESÍCULA BILIAR IRRESECABLE O METASTÁSICO: CONCLUSIONES DEL CONSENSO LATINOAMERICANO DE MANEJO DEL CÁNCER DE VESÍCULA BILIAR

Bettina Müller, Gerardo Arroyo, Jorge Gallardo, Luis Villanueva, Pablo González, Ramón Baeza, Xabier De Aretxabala, Fernando Maluenda, Alejandro Acevedo, Fernando Chuecas, Juan Carlos Díaz, César García S., José Miguel Reyes, Claudio Navarrete

Gallbladder cancer is a rare disease in Western developed countries, but it is a highly prevalent and lethal disease in Chile and other countries in Latin America. No randomized controlled trials have been performed in gallbladder cancer to establish standard treatments. We therefore performed the first Latin American consensus meeting for the management of gallbladder cancer. In this article we present the conclusions of the panel of experts for the palliative treatment of unresectable or metastatic gallbladder cancer based on a review of the literature, the discussion of the participating experts and the opinion of the assistants. The topics reviewed included: 1.- Gallbladder Cancer and Cholangiocarcinoma -are they the same disease?; 2. - Palliative Chemotherapy: Indications, Drugs and Schedules; 3. - Palliative Radiotherapy; 4.- Palliative Surgery; 5.-Management of Malignant Biliary Obstruction.

DEPARTAMENTO DE NEUROLOGÍA Y NEUROCIRUGÍA

REV MED CHILE 2011; 139: 54-59

ESTUDIO DE CORRELACIÓN CLÍNICO-RADIOLÓGICA, SENSIBILIDAD Y ESPECIFICIDAD DE ECOTOMOGRAFÍA TRANSCRANEANA EN ENFERMEDAD DE PARKINSON Y OTROS TRASTORNOS DEL MOVIMIENTO

Pablo Venegas F., Gonzalo Miranda G., M. Consuelo Silva C.

Background: The detection of hyperechogenicity of the substantia nigra using transcranial sonography can be predictive of the diagnosis of Parkinson Disease. Aim: To report an experience with transcranial sonography for the diagnosis of Parkinson disease. Material and Methods: One hundred sixteen patients with movement disorders were subjected to a transcranial sonography to detect the presence of hyperechogenicity of the substantia nigra and basal ganglia. Afterwards, two physicians, unaware of the results of the sonography, examined the patients and reached a clinical diagnosis. The concordance between ultrasound results and the clinical diagnosis was analyzed. Results: In 64 patients, a clinical diagnosis of Parkinson disease was reached. Of these, 52 patients had substantia nigra hyperechogenicity and in 12, it was normal. On the other hand ultrasound was normal in 42 of 43 patients without a clinical diagnosis of Parkinson disease. Therefore the sensitivity and specificity of transcranial ultrasound for the diagnosis of Parkinson disease was 81 and 97%, respectively. Conclusions: Transcranial sonography has a good sensitivity and specificity for the diagnosis of Parkinson disease.

REV MED CHILE 2011; 139: 100-106

TRASTORNOS AUTONÓMICOS EN ENFERMEDAD DE PARKINSON

Rodrigo Gómez, Lorena Hudson, Pablo Venegas

The current concept of Parkinson Disease comprises a group of non-motor symptoms. Among these, dysautonomia is a common problem that deteriorates the quality of life of patients. In this article we review the most common dysautonomic manifestations that are observed in cardiovascular, gastrointestinal, urinary, genital and skin systems. Their possible role as risk factors, premotor symptoms and their implications in the pathogenesis of Parkinson Disease are discussed. A general approach to the main syndromes, based in the available evidence and in our experience is also presented.

DEPARTAMENTO DE OBSTETRICIA Y GINECOLOGÍA

REV MED CHILE 2011; 139: 72-78

MALFORMACIONES CONGÉNITAS EN CHILE Y LATINO AMÉRICA: UNA VISIÓN EPIDEMIOLÓGICA DEL ECLAMC DEL PERÍODO 1995-2008

Julio Nazer H., Lucía Cifuentes O.

Background: The Latin American Study of Congenital Malformations (ECLAMC) has performed an epidemiological surveillance of congenital malformations since 1967. This allows to detect any unexpected change in the incidence of malformations, possibly caused by a new environmental teratogenic agent. Aim: To report a summary of the results thus far obtained in this study. Material and Methods: The ECLAMC database was analyzed and all live births and stillbirths of more than 500 grams in the period 1995-2008, were analyzed. Results: There were 2,409,407 births in the nine participant countries. Of these 31,516 (1.3%) were stillbirths. The global rate of congenital malformations in this sample was 2.7%. In the studied period, there was a significant reduction in the rates of anencephaly and spina bifida in Chile and Argentina. In the rest of the countries, the global rates of malformations increased. Venezuela had the higher rate of teenage pregnancies (25%), followed by Colombia (23%). Chile had the higher percentage of women aged 35 years or more giving birth (14%), followed by Uruguay (13%). However, Chile had the higher rate of Down syndrome and Uruguay, the lowest (24.7 and 13.6 per 10000). Conclusions: There is a tendency towards an increase in the rates of congenital malformations in this sample, with significant differences among countries.

REV MED CHILE 2011; 139: 66-71

COMPARACIÓN DE LOS CRITERIOS DE NUGENT Y SPIEGEL PARA EL DIAGNÓSTICO DE VAGINOSIS BACTERIANA Y ANÁLISIS DE LOS RESULTADOS DISCORDANTES POR EL MÉTODO DE ISON Y HAY

María Angélica Martínez, Alfredo Ovalle, Ana María Gaete, Eduardo Lillo, Felipe De La Fuente, Fabián Araneda, Rodrigo Villaseca, Hugo Salinas

Background: Vaginal infection is the commonest cause of genital symptoms and has obstetric and gynecological implications. Aim: To compare the Nugent and Spiegel methods for the diagnosis of bacterial vaginosis (BV) and to analyze discordant specimens using Ison and Hay (Ison/Hay) criteria. Material and Methods: After discarding cases with Candidiasis, deficient specimens or those lacking bacteria, a total of 348 Gram-stained smears vaginal specimens received for the diagnosis of BV, were analyzed. Results: Vaginal microbiota was classified as normal in 203 and 237 samples (58 and 68% of samples), according to Nugent and Spiegel criteria, respectively. One hundred and five (30%) and 111 samples (32%), were classified as VB according to Nugent and Spiegel criteria, respectively. Both criteria were concordant in 308 samples (88.5%). The 40 (11.5%) discordant specimens were classified as intermediate microflora by the Nugent system and as normal or BV by Spiegel. Among these, the Ison/Hay procedure identified four categories of microbiota. Ten (25%) specimens were classified as grade II microbiota, confirming their categorization by Nugent as intermediate microbiota, six (15%) were classified in the III category, confirming the diagnosis of BV by Spiegel, 13 (32.5%) corresponded to the category III, that does not exist in the Nugent and Spiegel categorization systems. Finally, 11 specimens could not be assigned to one category due to microscopic limitations to distinguish bacterial morphotypes. Conclusions: The systems proposed by Spiegel, Nugent and Ison/Hay are comparable for the diagnosis of BV. However, we recommend the use of Ison/Hay procedure to evaluate vaginal microbiota, due to its wider range of categories, allowing a better discrimination of the vaginal microbiota.

DEPARTAMENTO DE PSIQUIATRÍA Y SALUD MENTAL

REV MED CHILE 2011; 139: 1298-1304

TRASTORNOS MENTALES COMUNES Y USO DE SERVICIOS DE SALUD EN POBLACIÓN INMIGRANTE

Graciela Rojas, Rosemarie Fritsch, Ariel Castro, Viviana Guajardo, Pamela Torres, Berta Díaz

Background: Chile is receiving immigrant populations coming from other Latin-American countries. Aim: To determine the prevalence of Common Mental Disorders (CMD) among immigrants who live in Independencia, a quarter in Santiago, Chile.

Material and Methods: A cross sectional study was carried out in the primary health care clinic and in the state-funded school of Independencia. A representative sample of 282 adults and 341 children were interviewed. Mental disorders were diagnosed using CIS-R and MINI structured interviews. Results: The interviewed immigrants came mostly from Peru. The prevalence of mental disorders in the adult population was 17.8% and among children, it was 29.3%. Conclusions: The adult immigrants have a lower prevalence of mental disorders than the Chilean population but it increases among children. Barriers of access to health services, that should be solved, were detected.

REV MED CHILE 2011; 139: 592-599

EL PROGRAMA NACIONAL PARA EL DIAGNÓSTICO Y TRATAMIENTO DE DEPRESIÓN EN ATENCIÓN PRIMARIA: UNA EVALUACIÓN NECESARIA

Rubén Alvarado, Graciela Rojas

Background: Depression is highly prevalent among Chilean adults, therefore a primary care treatment program was devised. Aim: To evaluate the Program for detection, diagnosis and integral treatment of depression, implemented in Chilean Primary Health Care Centers. Material and Methods: A three and six months follow-up study was conducted among women admitted to the program at seven primary health care centers in two regions of Chile. Socio-demographic data, treatments provided and compliance with the program were assessed. A clinical standardized interview (with ICD-10) was carried out and the intensity of depressive symptoms was evaluated using Beck Depression Inventory (BDI). Results: The initial sample was composed by 201 women aged 25 to 65 years. At 6 months, 35% were lost from follow up. Depression was mild, moderate or severe in 12, 63 and 25% of women, respectively. The severity of depression was underestimated by primary care teams. Among women with regular and irregular attendance to medical appointments and those that abandoned treatment, BDI score decreased by 35,37 and 13%, respectively. Conclusions: This primary care program for depression was effective to reduce BDI scores. Diagnostic precision of primary care teams must be improved.

REV CHIL INFECT 2011; 28(1): 14-18

CALIDAD MICROBIOLÓGICA DEL AIRE DE UNA UNIDAD DE PREPARADOS FARMACÉUTICOS ESTÉRILES

Beatriz Caorsi P., Andrea Sakurada Z., M. Teresa Ulloa F., Marcela Pezzani V. y Paz Latorre O.

Introducción: La elaboración de preparados farmacéuticos estériles requiere áreas limpias que deben cumplir estándares internacionales para minimizar la contaminación microbiana. Objetivo: Evaluar la calidad bacteriológica del aire de la Unidad de Preparados Farmacéuticos Estériles del Servicio de Farmacia del Hospital Clínico de la Universidad de Chile y establecer niveles de alerta y acción. Material y Métodos: Se monitorearon ocho puntos representativos de la unidad, diariamente entre enero y febrero de 2005 y bisemanalmente de junio a febrero de 2006. Se estudiaron 839 muestras de aire, recolectadas mediante el método de impacto en placa (equipo MAS-100). Resultados: De las muestras estudiadas, 474 (56,5%) fueron positivas; de éstas, sólo 17 (3,5%) estuvieron fuera del rango permitido, porcentaje que representa el 2% del total. Las muestras de los sitios 1 y 2 (flujo laminar grande y pequeño), que corresponden al área de preparación de preparados estériles fueron negativas. Los sitios 3 (mesón) y 4 (transfer) presentaron ocasionalmente valores superiores a los límites. Los microorganismos más frecuentes fueron *Staphylococcus coagulasa negativa*, *Micrococcus spp* y *Corynebacterium spp*, agentes de la microbiota de la piel y, menor porcentaje, *Bacillus spp*, agente de la microbiota ambiental. Conclusiones: Desde el punto de vista microbiológico, la calidad del aire de la zona de preparaciones estériles descrita presenta niveles ajustados a estándares internacionales. El establecer niveles de alerta y acción institucionales y la identificación de los microorganismos obtenidos en las áreas más sensibles de la unidad permite cuantificar la carga microbiana y conocer sus componentes para determinar las intervenciones a realizar cuando ellas estén indicadas.

UNIDAD PACIENTES CRÍTICOS

REV CHIL INFECT 2011; 28(1): 41-49

CANDIDIASIS INVASORAS EN EL PACIENTE CRÍTICO ADULTO

Eduardo Tobar A., Francisco Silva O., Roberto Olivares C., Pablo Gaete G. y Mario Luppi N.

Las infecciones invasoras por *Candida* spp, representan una patología relevante en los pacientes críticos. Para su oportuno diagnóstico es necesaria una elevada sospecha clínica, tomando en consideración el cuadro clínico y la presencia de factores de riesgo. Pese a la incorporación de nuevos fármacos al arsenal terapéutico durante la última década, mantiene una elevada mortalidad. Las claves para mejorar los desenlaces clínicos en estos pacientes son el empleo de una terapia precoz, eficaz y que permita la cobertura de distintas especies de *Candida*: *C. albicans* y no *albicans*. Recientes guías internacionales sugieren la terapia empírica con equinocandinas ante la sospecha de candidiasis invasora en esta población de pacientes. Este grupo de fármacos ha documentado adecuada eficacia clínica y seguridad en estos pacientes. Se espera que la incorporación de nuevas equinocandinas al mercado aminore sus costos y mejore el acceso a este grupo de fármacos.

REV MED CHILE 2011; 139: 1458-1464

ERRORES DE MEDICACIÓN EN PACIENTES CRÍTICOS ADULTOS DE UN HOSPITAL UNIVERSITARIO. ESTUDIO PROSPECTIVO Y ALEATORIO

Nicole Salazar L., Marcela Jirón A., Leslie Escobar O, Eduardo Tobar, Carlos Romero

Background: Critically ill patients are especially vulnerable to medication errors (ME) due to their severe clinical situation and the complexities of their management. Aim: To determine the frequency and characteristics of ME and identify shortcomings in the processes of medication management in an Intensive Care Unit. Patients and Methods: During a 3 months period, an observational prospective and randomized study was carried out in the ICU of a university hospital. Every step of patient's medication management (prescription, transcription, dispensation, preparation and administration) was evaluated by an external trained professional. Steps with higher frequency of ME and their therapeutic groups involved were identified. Medications errors were classified according to the National Coordinating Council for Medication Error Reporting and Prevention. Results: In 52 of 124 patients evaluated, 66 ME were found in 194 drugs prescribed. In 34% of prescribed drugs, there was at least 1 ME during its use. Half of ME occurred during medication administration, mainly due to problems in infusion rates and schedule times. Antibacterial drugs had the highest rate of ME. Conclusions: We found a 34% rate of ME per drug prescribed, which is in concordance with international reports. The identification of those steps more prone to ME in the ICU, will allow the implementation of an intervention program to improve the quality and security of medication management.