



Contacto Científico

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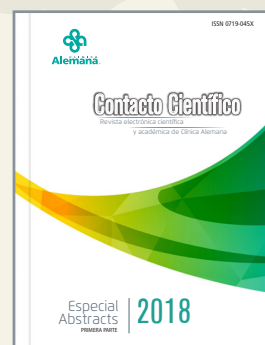
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Marcando presencia en la escena internacional

Dr. Fernando Cádiz

Editor jefe

Revista Contacto Científico

Departamento Científico Docente

Centro de Mama Clínica Alemana de Santiago

Ginecología Mastología

Contacto: fcadiz@alemana.cl

Contribuir al desarrollo del conocimiento médico es uno de los pilares de la misión de Clínica Alemana. Mantener y potenciar la excelencia profesional del cuerpo médico y odontológico, en tanto, es un concepto que sienta las directrices del trabajo del Departamento Científico Docente (DCD). En ambos fundamentos está presente la generación de conocimiento, elemento clave para seguir liderando en el campo de la medicina local y ofrecer una atención de primer nivel a nuestros pacientes.

El Departamento Científico Docente hace un permanente esfuerzo por ofrecer distintos tipos

de estímulos a los integrantes del equipo médico y odontológico que dedican parte de su tiempo a actividades académicas y de investigación. Uno de ellos es el apoyo a la presentación de trabajos y posters en congresos, como una forma de impulsar la presencia de nuestros especialistas en cursos internacionales y de fomentar, de esa manera, el intercambio de conocimiento entre pares.

Y ese es justamente el espíritu detrás de este primer número especial dedicado a abstracts, de nuestra revista Contacto Científico. No sólo compartir con ustedes el trabajo presentado en el extranjero durante



el primer semestre de este año, y que en su mayoría contó con el apoyo del DCD, sino también ofrecer otra vitrina que permita compartir nuestra producción y aumentar su visibilidad.

Sabemos que el compromiso con lo académico implica muchas veces un alto costo personal, dejando de atender pacientes en consulta y destinando tiempo libre o de la familia a estas actividades. Es por esto que respaldar esta opción que tomamos muchos de nosotros, es algo prioritario tanto a nivel departamental como institucional. Permanentemente se están buscando nuevos incentivos para incorporar

y seguir impulsando el desarrollo de la academia en la clínica.

Los invitamos a leer esta edición especial y a conocer el trabajo que están desarrollando diferentes áreas, varios en colaboración interdepartamental, y que cuentan con la participación fundamental de otros profesionales de la salud, como paciente crítico, dermatología, urología, nutrición, entre otros.

Abstract 1.

Implementation of a platform for objective immunohistochemistry analysis in a tertiary hospital from Chile: a pilot study

¹Viviana Ahumada, MSc
¹Marcela Gallegos, MD,
¹Marcela Schultz, MD,
¹Daniel Carvajal-Hausdorf, MD

¹Clinica Alemana – Facultad de Medicina Universidad del Desarrollo. Santiago, Chile.

Presentado en United States and Canada Academy of Pathology (USCAP) 107th Annual Meetings 2018.
17 al 23 de marzo, Vancouver, Canadá.

Introduction: Accurate and reproducible examination of predictive immunohistochemistry (IHC) assays is key for treatment selection in breast cancer. Local, conventional evaluation of IHC is subject to assay variability and interpretative subjectivity. Here, we applied an objective, automated platform for IHC quantification in a series of breast cancer biopsies and correlated its performance with traditional pathology assessment.

Methods: IHC slides for ER, HER2 and Ki-67 from 64 core biopsies from 60 patients diagnosed at a Chilean tertiary hospital were scanned using an Aperio® AT2 scanner (Leica). Whole tissue (WT) and tumor only (TO) were selected by

an operator trained by a breast pathologist. These areas were analyzed using FDA-approved algorithms for nuclear and membrane positive pixel counting with capability for tumor cell detection. We compared agreement of WT and TO analysis to pathologist evaluation (PE) for percentage cell positivity (ER and Ki-67) and intensity scoring (HER2) using intraclass correlation (ICC) and kappa (κ) coefficients, respectively, as well as time required for analysis. All tests were two-sided (mean \pm SEM).

Results: For all biomarkers, WT included an increased number of cells in the analysis, compared to strict TO selection (151550 \pm 9773 vs 77567 \pm 8050, $P < 0.0001$). For

ER, WT and TO showed the highest concordance (ICC=0.924), while WT and PE had the lowest (ICC=0.837). For Ki-67, WT and TO showed the highest concordance (ICC=0.968), while WT and PE showed the lowest (ICC=0.84). When intensity scoring for HER2 was evaluated taking PE as standard, agreement was moderate and similar for WT and TO ($\kappa = 0.466$ and 0.429 , respectively). Automated TO evaluation required an increased amount of time per

case, compared to WT and PE (124.6 ± 7.9 vs 4.7 ± 0.1 vs 6.9 ± 0.1 minutes, respectively, $P < 0.0001$).

Conclusion: While objective IHC analysis shows promising results when compared to standard evaluation, issues with tissue recognition and duration of analysis need to be solved. These methodologies might find their best application in classifying borderline cases.



Abstract 2.

Social Determinants of Adolescent Pregnancy in Chilean Adolescents

Andrea Huneus MD, MPH*
Gabriel Cavada
Francisca Ramirez
Marcela Reyes
Paulina Salinas
Constanza Sanhueza
Magdalena Solar

Facultad Medicina, Clínica Alemana
Universidad del Desarrollo, Santiago, Chile.

Presentado en Congreso de la Sociedad Norteamericana de Ginecología Infanto Juvenil (NASPAG), 12 y 13 de abril 2018, West Palm Beach, Florida, Estados Unidos.

Comentario

Determinantes Sociales del Embarazo en Adolescentes en Chile.

Esta investigación se realizó en el contexto del seminario de investigación con un grupo de estudiantes de medicina de la Facultad de Medicina Clínica Alemana - Universidad del Desarrollo. Se hizo un análisis estadístico ponderado de la base de datos anonimizada de la Encuesta Nacional de Juventud de 2015, para describir los determinantes sociales de salud que se asocian con haber estado embarazada o embarazar a alguien durante la adolescencia en los 4,3 millones de adolescentes chilenos.

Ser mujer, tener nivel socioeconómico más bajo, no haber completado educación básica y tener previsión Fonasa son determinantes sociales de la salud asociada con el embarazo adolescente en Chile. Las intervenciones sociales centradas en mejorar la inequidad de género, de ingresos y completar la escolaridad hasta educación media, pueden tener un papel potencial en la reducción del embarazo adolescente.

Dra. Andrea Huneus MPH

ABSTRACT

BACKGROUND: In Chile, the 14% of deliveries occur in adolescent mothers. Local determinants of adolescent pregnancy can help formulate strategies to reduce its impact. The objective of this study was to describe social determinants of health of Chilean adolescent pregnancy.

METHODS: Drawing on the 2015 Chilean National Youth Survey, a population-based sample of 9,393 general community youth aged 15 to 29 years, we conducted a study to examine social determinants of teen pregnancy described in the literature associated with the occurrence of an unwanted pregnancy under 19 years of age. This survey used a multistage probability sampling design to select participants who were representative of the 4,283,245 Chilean youth and adolescents in this age group. After stratifying by region and urban/rural residence, a complex sampling approach was used to randomly select households, and 1 eligible individual from each household was selected to complete an in-person home interview. Bivariate analysis and multiple logistic regressions were used. All analyses were weighted to reflect a nationally representative sample using survey estimation commands in Stata version 12.1 that account for complex study design. IRB gave exemption to approval because the data set is anonymized.

RESULTS:

50.85% of the participants aged 15 to 29 years old were females and 49.15% were males. 76% reported onset of sexual activity. 9.91% identified with indigenous ethnicities. 44.43% belonged to low socio economic status, 51.02% to medium and 4.55% to high socio economic status.

6.7% of Chileans had been pregnant or made a partner pregnant when 18 years old or under. Females experienced more adolescent pregnancy (8.73%) than males (4.68%) ($p=0.00$). Adolescent pregnancy was more prevalent among low socio economic status Chileans (7.68%) compared to those with medium (6.06%) or high socio economic status (3.83%) ($p=0.049$). Chileans with public health insurance had more adolescent pregnancy (7.72%) compared to those privately insured (4.94%). When educational attainment was less than high school, adolescent pregnancy was higher (8.77%) compared to those with high school or more (5.56%) ($p=0.007$). Rural residence, nationality, ethnicity, religion, disability, were not associated with adolescent pregnancy. On multivariate analysis, female gender was a significant risk of adolescent pregnancy (OR=1.82; 95%CI 1.15-2.88)

CONCLUSIONS: Female gender, lower socio economic status, public health insurance, and lower educational attainment are described as social determinants of health associated with adolescent pregnancy in Chile. Social interventions focused on improving gender, income and educational inequality may have a potential role in reducing adolescent pregnancy.

Abstract 3.

Lung Recruitment Assessment in ARDS – Nitrogen Dilution and Simple Mechanics versus Computed Tomography

Álvaro Salazar
Rodrigo Pérez
René López
Jerónimo Graf

Departamento de Paciente Crítico
Clínica Alemana de Santiago, Facultad de Medicina
Clínica Alemana, Universidad del Desarrollo, Santiago, Chile

Presentado en Monitoring in Acute Respiratory Failure (ARF), 3 al 5 de mayo, Madrid, España.

Abstract

INTRODUCTION: Reversibility of lung collapse or lung recruitability (LR) is extremely variable in patients with acute respiratory distress syndrome (ARDS). Quantitative analysis of chest computed tomography (CT) is considered the gold standard for LR assessment.

Respiratory mechanics have also been classically used for this purpose. Agreement between CT and respiratory mechanics for the quantification of LR has been reported as variable.

OBJECTIVES: To compare end-expiratory lung volume (EELV) measurements and LR quantification from CT and nitrogen dilution (ND) in ARDS patients.

Methods: We measured static respiratory system compliance (Cst) and EELV by ND under two PEEP levels, 10 cmH₂O apart, with a lung recruitment maneuver in between. Recruited volume from ND was computed as the difference of PEEP-induced EELV change (Δ EELV) and Cst at the low PEEP level times 10. Thoracic CT scans were performed at end-expiration at both PEEP levels following the same sequence. Gas lung volume and aerated lung tissue mass were computed at both PEEP levels with a -100 HU threshold. LR from CT was defined as PEEP-induced increase in aerated lung tissue mass. Recruitment efficiency was defined as the ratio between recruited volume or mass and Δ EELV. Patients with auto-PEEP greater than 2 cmH₂O were excluded.

Results: We studied 15 ARDS patients with a PaO₂/FiO₂ ratio of 122 ± 29 at PEEP 5 ± 4 and 15 ± 4 cmH₂O. Table 1 shows EELV at both PEEP levels, ΔEELV, LR and recruitment efficiency using CT and ND as well as their Pearson correlations, bias and limits of agreement.

Conclusions: Lung volume measurements and recruitment quantification from CT and ND correlate well with small biases, but large limits of agreement. Bedside EELV measurements in conjunction with respiratory mechanics can be used as a reasonable LR estimate in ARDS patients although not interchangeably with CT.

	CT		ND		r	p	bias	LOA	
	Mean	SEM	Mean	SEM					
EELV1 (ml)	782	21	735	19	0,915	<0,001	46	-336	429
EELV2 (ml)	1498	25	1378	21	0,884	<0,001	120	-502	742
Delta EELV (ml)	716	19	642	15	0,772	<0,01	74	-399	547
LR (ml or g)	384	17	361	15	0,885	<0,001	23	-252	298
LR/Delta EELV	0,53	0,5	0,53	0,42	0,815	<0,001	0,005	-0,28	0,29

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Abstract 4.

Carbon dioxide production and ventilatory inefficiency along a T-piece spontaneous breathing trial are associated with difficult weaning

René López
Rodrigo Pérez
Iván Caviedes
Jerónimo Graf

Clínica Alemana de Santiago, Departamento de Paciente Crítico, Santiago, Chile
Facultad de Medicina Clínica Alemana-Universidad del Desarrollo, Santiago, Chile

Presentado en Monitoring in Acute Respiratory Failure (ARF), 3 al 5 de mayo, Madrid, España.

Abstract

Introduction: Ventilatory monitoring along a T-piece spontaneous breathing trial (SBT) is limited. Volumetric capnography (VC) provides variables that may be associated with difficult weaning, such as CO₂ production (VCO₂) and ventilatory inefficiency calculated from the slope between minute ventilation and VCO₂ (VE/VCO₂). We recently reported a good correlation between VE/VCO₂ and physiological dead space in mechanically ventilated patients.

Objective: To evaluate if VCO₂ and/or VE/VCO₂ along a T-piece SBT are associated with difficult weaning.

Method: We prospectively performed a one-hour SBT with a CO₂/flow sensor between the endotracheal tube and the T-piece. Data was continuously recorded on a personal computer connected to a VC monitor (NICO₂, Wallinford, CT, USA). Mean VCO₂ and VE/VCO₂ slopes were calculated. Difficult weaning included 3 categories: SBT failure (SBT-F) defined as inability to complete the trial or to extubate upon its completion, post extubation respiratory failure (PERF) defined as the need of non-invasive ventilation within 48 hours after extubation and extubation failure (EF) defined as the need for reintubation within 48 hours after extubation. Associations between VC variables and weaning outcomes were explored with t-test and ROC curves.

Results: Twenty seven SBT were performed on 24 patients mechanically ventilated for 6 ± 5 days with an APACHE II of 17 ± 11 and a SOFA score 8 ± 3 points. 46% had sepsis/shock, 33% had acute respiratory failure and 21% were trauma/surgical. Sixteen trials presented difficult weaning; 5 with SBT-F, 7 with PERF and 4 with EF. Patients with difficult weaning had a higher mean VCO₂ and VE/VCO₂ slope (table 1). The AUC of the ROC curves of mean VCO₂ and VE/VCO₂ slope for difficult weaning were 0.73 [0.54-

0.92] and 0.75 [0.55-0.94], respectively (figure 1). Patients with SBT-F only had a higher mean VCO₂, while patients with PERF only had a higher VE/VCO₂ slope (table 2).

Conclusions: Mean carbon dioxide production and ventilatory inefficiency are associated to difficult weaning; specifically a higher VCO₂ is related to inability to tolerate a SBT and ventilatory inefficiency to the need for non-invasive ventilation after extubation.

Tabla 1.

		VCO ₂ (mL/min)	<i>p</i>	VE/VCO ₂ slope	<i>p</i>
Difficult weaning (n=16)	Yes	274 ±22	0,020	33 ±3	0,021
	No	212 ±12		25 ±2	

Figure 1.

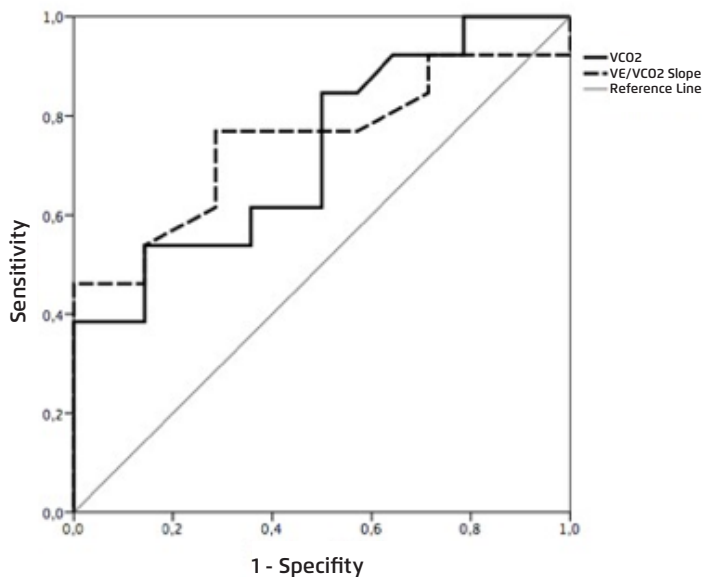


Tabla 2.

		VCO ₂ (mL/min)	<i>p</i>	VE/VCO ₂ slope	<i>p</i>
SBT-F (n=5)	Yes	303 ±35	0,030	32 ±7	<i>ns</i>
	No	228 ±13		28 ±7	
PERF (n=7)	Yes	235 ±21	<i>ns</i>	35 ±4	0,019
	No	212 ±13		25 ±2	
EF (n=4)	Yes	254 ±29	<i>ns</i>	34 ±7	<i>ns</i>
	No	211 ±12		27 ±2	

Abstract 5.

Histopathological Findings of Persistent Inflammatory Scalp, A Prelude to Primary Cicatricial Alopecia?

Jorge Larrondo, MD, MSc¹
Marianne Gosch, MD, MSc²
Raúl Cabrera, MD¹
Alex Castro, MD¹
Amy McMichael, MD³

¹ Clínica Alemana, Santiago, Chile

² Hospital del Salvador Santiago, Chile

³ Wake Forest Baptist Health, Winston-Salem, NC, USA

Presentado en 2018 American Hair Research Summit (AHRs), 14 al 16 de mayo, Orlando, Estados Unidos.

TAKE HOME MESSAGE: Persistent inflammatory scalp could represent an early stage to some primary cicatricial alopecias, we need to better characterize this entity in order to make a prompt diagnosis and treatment.

ABSTRACT

Introduction

Primary cicatricial alopecias (PCA) are inflammatory scalp conditions that may lead to permanent hair loss. Diagnosis is often delayed because a significant amount of hair is usually lost before the alopecia becomes apparent. Nevertheless, studies have shown that hair loss may progress subclinically, and even "normal" appearing areas could show histologic

evidence of disease. Here, we characterize 12 patients with persistent inflammatory scalp that resembles to PCA in histopathology.

Objective

Characterization of patients with persistent inflammatory scalp.

Methods

Retrospective review of cases with diagnosis of inflammatory scalp but not evident signs of alopecia seen at Clínica Alemana during 2016-2017. Inflammatory scalp conditions like contact allergic dermatitis, psoriasis and

seborrheic dermatitis were ruled out. Clinical, demographics and laboratory features were established. Clinical and dermatoscopic images were recorded. Biopsy specimens (two, 4mm punch) were guided by dermatoscopy and direct immunofluorescence (DIF) was performed.

Results

12 patients (1 male and 11 females) with ages ranged from 24 to 52 years (mean: 41) consulted because of intermittent shedding. 7 cases presented with pruritus and 3 with trichodynia. Appearance of symptoms (shedding, trichodynia and pruritus) was within two years for the majority of patients. Dermatoscopy mainly showed mild hair tufting, peripilar casts and perifollicular erythema. In biopsy specimens, perifollicular lymphocytic inflammation (around infundibulum and isthmus) was seen in all of the samples, being mild in most cases. Perifollicular fibrosis was present in 8 cases. An average of 30 hairs were found in

the samples. No significant mucin deposit was present and DIF resulted positive in two cases.

Conclusion

The histopathological findings of our patients shared similar features of some PCA entities but in a milder way. Our findings resemble to those reported in unaffected areas of PCA patients and other subclinical inflammatory conditions. This entity could represent an early stage of PCA.

Jorge Larrondo G, MD, MSc, is a dermatologist graduated from the University of Chile. He trained in Trichology and Hair Restoration Surgery at the University of Alcalá de Henares. He is currently working at Clínica Alemana, Hospital Padre Hurtado and Hospital del Salvador, in Santiago de Chile. His main interests are: cicatricial alopecias, trichoscopy and hair restoration surgery.

J. Larrondo: Consultant/Advisory Board; ROL in La Roche-Posay. M. Gosch: Consultant/Advisory Board; La Roche-Posay. R. Cabrera: None. A. Castro: None. A. McMichael: None.

Abstract 6.

Genomic Analysis on Subjects Exposed to Arsenic Identifies Genetic Risk Variants Associated with Bladder Cancer and Variants Under Recent Adaptive Selection

Mario I. Fernández^{1,2}
Lucas Vicuña³
Patricio Valdebenito⁴
Eduardo Chaparro⁴
Cecilia Vial¹
Annemarie Ziegler¹
Alberto Bustamante²
Susana Eyheramendy³

¹ Center for Genetics and Genomics, Facultad de Medicina, Clínica Alemana Universidad del Desarrollo, Santiago, Chile

² Department of Urology, Clínica Alemana, Santiago Chile

³ Department of Statistics, Faculty of Mathematics, P. Universidad Católica, Santiago, Chile

⁴ Department of Urology, Hospital Regional, Antofagasta, Chile

Presentado en American Urological Association (AUA) Annual Meeting 2018, 18 al 21 de mayo, San Francisco, Estados Unidos.

INTRODUCTION AND OBJECTIVES: Only a small fraction of arsenic-exposed subjects is affected by malignant diseases. This suggests the existence of genetic risk factors influencing susceptibility to arseniasis and its consequences, such as bladder cancer (BC). Here, we evaluate this hypothesis by performing a case-control genome-wide association study (GWAS) for BC in subjects exposed to significantly elevated drinking-water arsenic levels in Northern Chile. Furthermore, since native people of this region have been exposed for thousands of years to arsenic present in underground water due to volcanic activity, they and their descendants might have adapted to this selective pressure. Therefore, we tested for adaptive selection since we also

hypothesized that control subjects from this cohort might have inherited protective genetic variants.

METHODS: Demographic and clinical data were collected using a structured questionnaire and a blood sample was obtained. DNA samples were analyzed using Affymetrix Genome-Wide SNP Array 6.0. After filtering by missingness per individual and per marker allele frequency and Hardy Weinberg Equilibrium we obtained 788,705 SNPs to be analyzed. Estimates of adaptive (Darwinian) selection by comparing allele frequencies that are unusually high in one vs. two related populations were performed using the Population Branch Statistics (PBS) test.

RESULTS: Several associations reaching genome-wide significance were identified after adjusting for global ancestry, age, sex, smoking habit and occupational risk factors. Whereas some of these variants mapped in genes without a previous relation to BC and thus constitute novel candidates for BC carcinogenesis, others were located in genes related to BC. For instance, an intron variant associated with CTNNA2, a gene linked to BC after undergoing epigenetic modifications in response to arsenic exposure. We further found a variant close to CHL1, which has been associated with arsenic toxicity in cell lines and also to occurrence of BC by acting as a tumor suppressor. PBS test found several candidate variants for adaptive selection in the control group when compared to populations from

Asia (CHB/JPT) and Central/ North America (Maya/Nahua). Several of these variants have also been associated with BC and arsenic-related processes, including two intron variants in CTNNA2.

CONCLUSIONS: The results of this study contribute to a better understanding of the genetic factors affecting BC in subjects exposed to arsenic and shed light into the recent evolutionary history of Native Americans. Candidate risk SNPs identified need to be further validated in independent analyses.

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Abstract 7.

ECLS-Related Coagulopathy and Transfusion Needs are Reversed by Circuit Exchange

René López
Juan Pablo Fuentes
Rodrigo Pérez
Matías Donoso
Jerónimo Graf

Clínica Alemana de Santiago, Departamento de Paciente Crítico, Santiago, Chile
Facultad de Medicina Clínica Alemana-Universidad del Desarrollo, Santiago, Chile

Presentado en 7th EuroELSO Congress on ECMO-ECLS, 23-26 de mayo, Praga, República Checa.

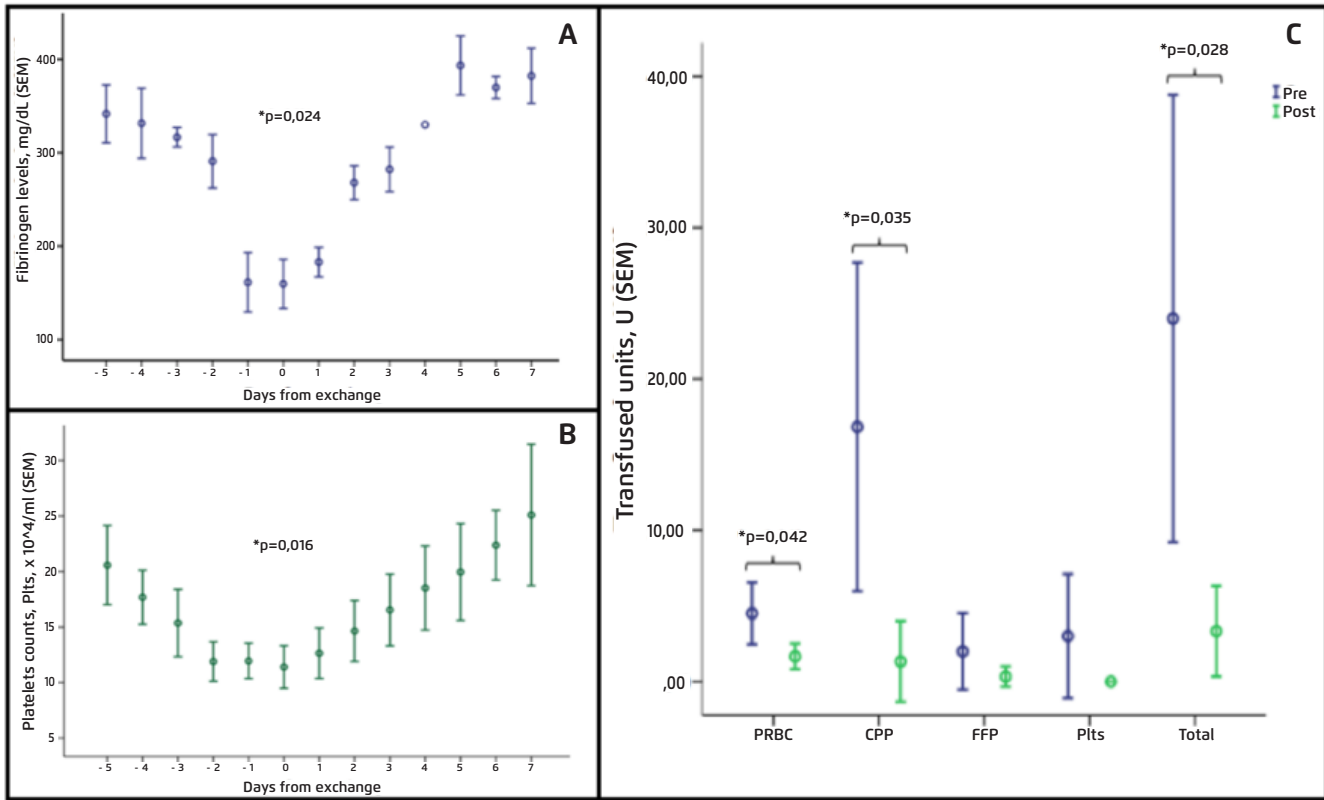
Background: Coagulation is a major concern during ECLS. We have observed that thrombocytopenia and hypofibrinogenemia are usual manifestations of ECLS-related coagulopathy (ECLS-RC). We describe a case series of ECLS-RC that was managed by circuit exchange (CE).

Methods: Retrospective analysis from our ECLS cohort of patients who developed ECLS-RC and were managed with CE. ECLS-RC was defined as progressive thrombocytopenia and/or hypofibrinogenemia. The decision of CE was made on clinical grounds.

Results: From a total of 44 ECLS runs we found 6 patients with CE due to ECLS-RC; 2 A-V ECCO2R, 2 V-V ECCO2R 2 V-V

ECMO. Epidemiological data as median [IQR]: Age 65 [48-70], circuit run 13 [11-16] days, APACHE II 34 [20-34] and SOFA 9 [7-9] points. These patients developed a progressive decrease of fibrinogen levels (Figure 1A) and platelets counts (Figure 1B) that recovered after CE. A significant reduction of transfusion needs was also noted after CE (Figure 1C). Four patients had mucosal bleeding associated to ECLS-RC, the other two did not have clinical expression of ECLS-RC.

Conclusion: These data suggest that in ECLS-RC circuit exchange is associated with recovery of fibrinogen and platelets levels as well as a reduction in transfusion needs. Circuit exchange could be considered as part of the management of ECLS-RC if ECLS removal is not possible.



Abstract 8.

Veno-arterial ECMO for severe Hantavirus cardiopulmonary syndrome. Chilean single-center case series

Jerónimo Graf
Vinko Tomicic
Juan Abarca
Michael Howard
Sergio Cisternas
René López
Pablo Vial

Departamento de Paciente Crítico, Clínica Alemana de Santiago, Santiago, Chile

Presentado en 7th EuroELSO Congress on ECMO-ECLS, 23-26 de mayo, Praga, República Checa.

Introduction: Hantavirus Cardiopulmonary Syndrome (HCPS) has a mortality rate between 30-40%. In severe cases a combination of refractory shock and severe acute respiratory distress leads to death. In these cases veno-arterial ECMO may support circulation and gas exchange while patients spontaneously recover. The largest case series reports a survival rate of 60% in 51 HCPS patients supported with ECMO (1994-2010, New Mexico, US).

Methods: We report 10 cases of severe HCPS supported with ECMO between 2001 and 2017 in a single center in Chile. We used the New Mexico ECMO connection criteria: Cardiac index $< 2.5 \text{ L/min/m}^2$ under maximal vasoactive support and arterial lactate $> 4 \text{ mmol/L}$ or $\text{PaO}_2/\text{FiO}_2$ ratio < 60 .

Results: Two patients died, one due to refractory shock

and the other due to sepsis. The second patient developed severe ischemia of the lower limb with large muscle mass loss; subsequently all patients received direct perfusion of the limb. Two patients had large femoral hematomas, one of them with severe superinfection. Two patients required cholecystectomy due to acalculous cholecystitis. One patient developed recurrent hepatic bleeding and hemoperitoneum that required arterial embolization. The survival rate was 80%. All survivors returned to their prior activities after extensive rehabilitation.

Conclusions: ECLS allowed rescue of 80% of severe HCPS patients. Severe HCPS patients treated with ECLS have a high complication rate that protracts their hospital stay and rehabilitation process.

Hemodynamic, respiratory and outcome variables of 10 severe Hantavirus cardiopulmonary syndrome patients supported with V-A ECMO

Patient / Year	2002	2006	2007	2008	2008	2013	2015	2016	2017	2017	Median
Age (years)	24	28	64	38	19	38	58	48	15	15	33 (15-64)
APACHE II score	27	21	20	17	22	19	28	24	10	17	20.5 (10-28)
Cardiac Index (L/min/m ²)	1.7	2.0	1.7	1.5	2.4	1.5	1.8	2.0	1.5	1.2	1.7 (1.2-2.4)
Lactate (mmol/L)	16.7	11.1	18.8	29.9	17.1	35	18	10.6	12.7	7.9	16.9 (7.9-35)
PaO ₂ /FiO ₂ ratio	64	91	57	37	44	120	81	105	152	147	86 (37-152)
Murray score (LIS)	4	3	2	4	4	4	4	3.75	3	3	4 (2-4)
Time on ECMO (hours)	110	50	72	62	109	96	105	96	77	105	96 (50-110)
Pump	Delphin	Delphin	Biomedicus	Biomedicus	Biomedicus	Rotaflow	Cardiohelp	Cardiohelp	Cardiohelp	Rotaflow	
Oxygenator	Affinity	Affinity	Avecor	Avecor	Avecor	PLS	HLS	HLS	HLS	PLS	
Mechanical ventilation (days)	14	27	12	4	12	7	13	20	7	9	12 (4-27)
ICU stay (days)	21	93	16	4	12	19	18	20	14	18	18 (4-93)
Hospital stay (days)	39	102	29	4	12	32	40	20	20	60	30.5 (4-102)
Major complications	0	1	0	0	1	0	1	1	0	1	50%
Survival	1	1	1	0	0	1	1	1	1	1	80%

Abstract 9.

Teaching students a positive attitude towards the higher weight patient. A current challenge.

Karen Salvo¹
Carla Benaglio²

¹ MD, School of Medicine, Faculty of Medicine, Clínica Alemana-Universidad del Desarrollo, Santiago (Chile),

² RN, MSc, Faculty Development Centre, Faculty of Medicine, Clínica Alemana-Universidad del Desarrollo, Santiago (Chile)

Presentado en 6th Annual Weight Stigma Conference, 18th -19th June, Leeds, UK.

Background

Increasing evidence shows that health related professionals, express negative feeling towards high weight people. Several tools from medical humanities can be useful for students to understand patients better and develop empathy.

Objective

To do an educational activity for medical students, design to reduce stigmatization and discrimination and improve patient-physician relationship.

Methods

The intervention is done in the third year of Medicine. It

consists in: Watching the film "Gordos" (Arevalo, 2008) that addresses multiple aspects higher weight person's life; Film analysis with a tutor, using a predefined guideline; Interview with a higher weight person.

A yearly evaluation is done by the Faculty Development Centre in our university.

Results

The intervention helps students to gain consciousness of their prejudices. 75.6% consider the film useful for understanding the topic; 78.1% that the discussion is a valuable complement, 95.1% that the interview is the most determining element.

Student comments “[...]the activity inspires me to learn more about life, about people their experiences, their feelings, it invites me to better observe and to listen more...” (E4).

Conclusion

The movie and interview resulted very useful tools that facilitated the students to better understand their own prejudices and improve their empathy.

Abstract 10.

“Sand-wich technique: a new way to standardize the tape adjustment at the moment of retropubic surgical procedure”

César Sandoval ^{1,2}
Felipe Andreoli ²
Rodrigo Guzmán-Rojas ^{1,2}

¹ Clínica Alemana, Santiago, Chile

² University of Desarrollo, Santiago, Chile

Presentado en 43rd Annual Meeting International Urogynecological Association (IUGA),
26 al 30 de junio de 2018, Viena, Austria.

Introduction: Midurethral Slings have become the standard treatment as anti-incontinence procedures. The original description of TVT had a precise guidance to establish the desired distance between tape-urethra: “Metzenbaum scissor” (3 to 5 millimeters) [1]. The tapes are supposed to be placed “tension-free” but there is a delicate balance between incontinence, continence, and obstruction because it is difficult to calculate the correct degree of tension to be applied during surgery.

Objectives: The aim of this study was to describe a new way to standardize the TVT adjustment at the moment of the surgical procedure and compare the postoperative clinical outcomes and ultrasound appearance at a follow-up

time of 3 months with a control group (standard procedure).

Methods: A prospective study was conducted at a single private center between May 2017 and December 2017. 35 women scheduled to undergo a MUS procedure were invited to participate. We standardized the procedure by placing a Hegar dilator of 8-millimeter diameter inside the urethra. Then we make a 1mm loop in the middle of the tape and pull it in cephalic direction until hitting urethra without placing a scissors or another device.

Following the procedure, women underwent post-voiding residual urine (PVR) measurement. At 3 months, Transperineal US assessment was underwent to determine

the location of the sling relative to the urethra (%), the gap between the sling-symphysis pubis (SP-Gap) and the tape-longitudinal smooth muscle (LSM) distance at rest and on Valsalva. The primary outcome was a negative cough-test at three months follow-up.

Results: The mean PVR after procedure was 36 ± 51 cc with a mean total volume $323,6 \pm 111$ cc ($41,5 \pm 20,7$ cc vs $28,8 \pm 76,6$ cc $p=0,48$; Standard vs Sand-Wich respectively). Short-term follow-up of 3 months showed that 35 of 35 (100%) patients reported no leakage of urine. We did not

encounter postoperative urinary retention in any patient. None of our patients in this series have complained of difficulties during micturition or the need to strain during voiding. Ultrasonography there was no significant difference between both groups except for SP-Gap at Valsalva ($13,8 \pm 3,1$ vs $11,5 \pm 1,5$; $p=0,018$ Standard vs Sand-Wich respectively)

Conclusions: At short term, this technique for adjustment of tension during surgery has similar clinical outcomes and ultrasound features with the standard procedure.

Table 1. Changes in sonographic characteristics at 3 months postoperative assessment (n=35)

Ultrasound Parameters	STANDARD	SAN-WICH	p
Uretral length (mm)	32,4±2,5	31,5±1,9	0,288
Tape-Bladder Neck (mm)	22,4±3,3	21,9±2,4	0,641
Sling Location (centile)	69,0±7,6	69,3±3,9	0,889
SP-Gap at rest (mm)	15,5±2,8	13,8±1,8	0,071
SP-Gap at Valsalva (mm)	13,8±3,1	11,5±1,5	*0,018
Tape-LSM at rest (mm)	4,0±0,6	4,1±0,4	0,388
Tape-LSM al Valsalva (mm)	3,6±0,5	3,6±0,4	0,960

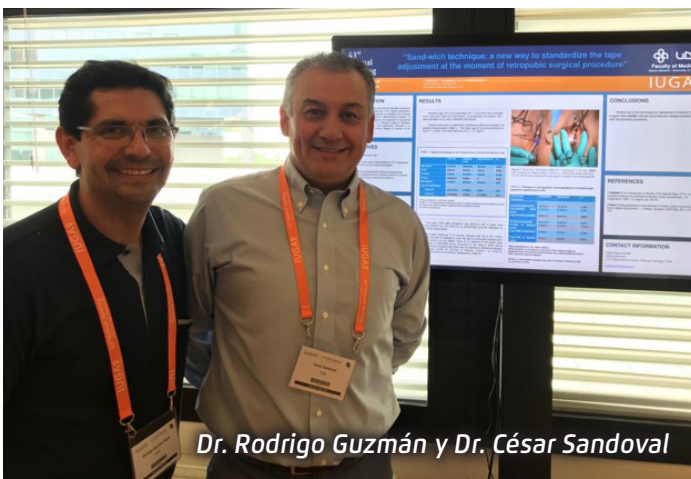
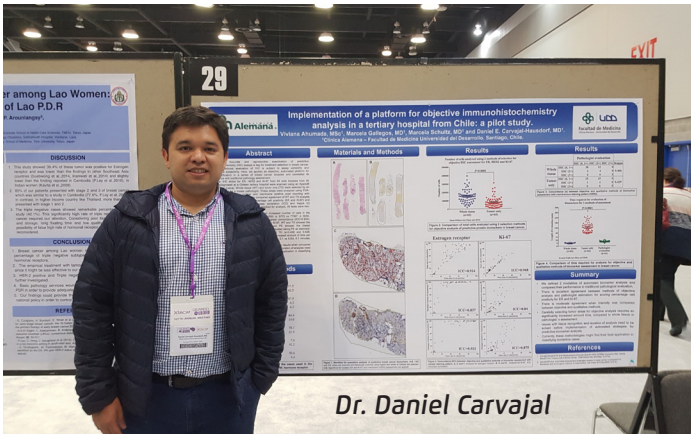
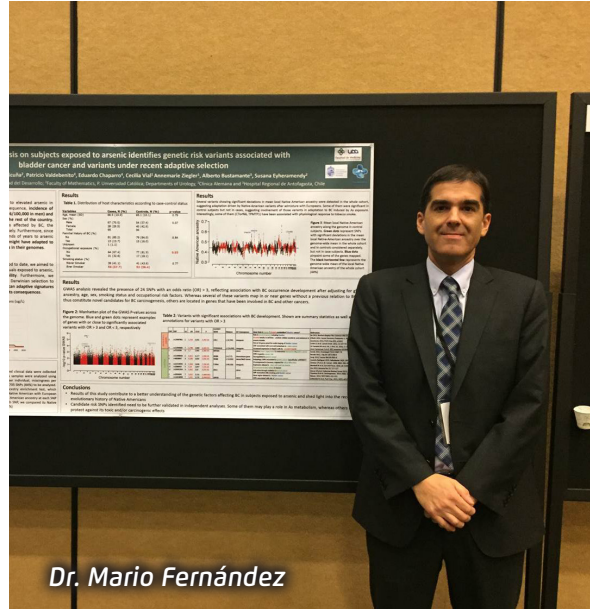
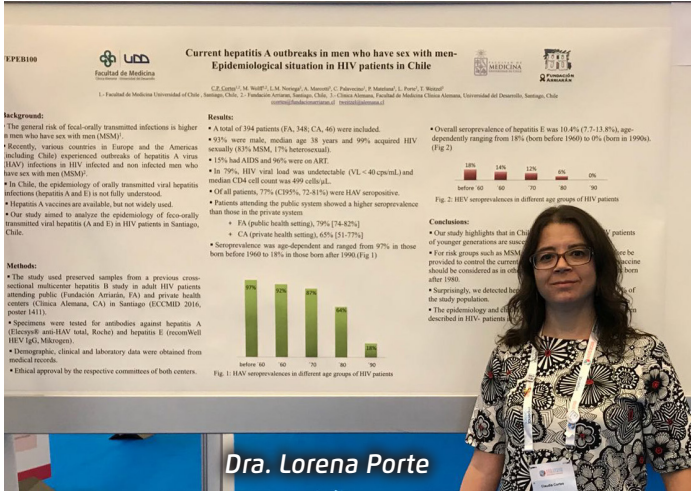
Data presented as n (%), mean (\pm SD)

†Sling location is expressed as percent of the urethral length as measured from the urethrovesical junction (0%, urethrovesical junction; 100%, external urethral meatus)

Student's t-test related samples was use to compare continuous data (*p significant ≤ 0.05)

References

1. *International Urogynecology Journal and Pelvic Floor Dysfunction*, vol. 12, supplement 2, pp. 53–54, 2001.
2. *J. Obstet. Gynaecol. Res.* Vol. 29, No. 6: 374–379, December 2003.



Normas Editoriales

CONTACTO CIENTIFICO

I. PREPARACION DE UN ARTICULO

Los autores deben preparar manuscritos de acuerdo con los requerimientos definidos por el Comité Internacional de Editores de Revistas Biomédicas (ICMJE), que pueden ser consultados en Ann Intern Med. 1997;126:36-47 o www.icmje.org. Los reportes de ensayos controlados y randomizados deben cumplir con la normativa de inscripción y diseño correspondiente, que puede ser consultado en Ann Intern Med. 2001;134:657-662.

El manuscrito debe estar escrito en letra Times New Roman, tamaño 12, a doble espacio y debe ordenarse de la siguiente manera (1) página del título (2) resumen, (3) lista alfabética de abreviaciones usadas al menos tres veces en el cuerpo del manuscrito y en resumen, figuras y tablas, (4) texto con encabezados apropiados y conclusiones, (5) agradecimientos, (6) referencias, (7) figuras (8) leyendas de las figuras (con lista alfabética de abreviaciones), y (9) tablas (con lista alfabética de abreviaciones).

El texto del manuscrito debe ser enumerado en forma consecutiva, incluyendo el nombre del primer autor y el texto debe contenerse en un archivo procesable por Word. Las tablas pueden ser hechas con el mismo programa Word, y ubicarlas al final del manuscrito. Los esquemas, gráficos y algoritmos pueden ser hechos y enviados en Word, PowerPoint o Adobe Illustrator. Las figuras deben ser guardadas como formato jpg, gif, o tiff a un mínimo de 300 dpi y no deben insertarse en el texto del manuscrito, sino que deben guardarse como archivo separado.

Página del título

Título: Formular un título que refleje el contenido del artículo.

Autores: Incluir apellidos y nombre, grado académico, departamento e institución a la que pertenece.

Financiamiento y conflictos de interés: indicar si existió financiamiento y ayuda material para la investigación o trabajo descrito en el manuscrito (ej. número de Grant, agencia financiante, a quiénes).

Reimpresiones y correspondencia: incluir nombres, dirección, e-mail del autor a quien se dirigirán estos requerimientos.

Resumen o Abstract

Abstract de 200 palabras y un resumen en términos sencillos ("plain language summary") de 50 palabras que describa el objetivo del estudio y su resultado principal.

Se debe organizar en un formato estructurado, con los siguientes encabezados: Objetivo, Pacientes y métodos, Resultados y Conclusión.

--Asegurar que la información en cada sección del resumen, está contenida en la correspondiente sección del texto.

--En la sección "Pacientes y métodos" del resumen y del texto, incluir las fechas completas que abarcó el estudio.

--Incluir el número de registro de Ensayo clínico, al final del resumen, si es el caso.

Texto

Los artículos originales deben considerar un máximo total de 2000 palabras, la introducción un máximo de 250 palabras y la discusión de 500.

No debe ser superior a 2000 palabras en el resto de los artículos.

En la introducción mencionar los antecedentes disponibles respecto del tema de estudio, establecer el objetivo de la investigación o revisión y plantear la hipótesis de trabajo.

--Abreviar un término sólo si es utilizado al menos tres veces en el texto y definirlo la primera vez que se menciona.

En la sección de pacientes (o materiales) y métodos describir las características del grupo de estudio o del caso clínico, los criterios de inclusión/exclusión, los equipos y/o fármacos utilizados, la probación del comité de ética local.

si corresponde, el consentimiento informado de los participantes y el tipo de análisis estadístico.

--Expresar medidas en Unidades convencionales, entregando el factor de conversión a Unidades del Sistema Internacional.

--Entregar valores exactos de p , incluso si no son significativos. Redondear valores de p a dos dígitos, si los primeros dos números después del decimal son ceros, entonces redondear a tres números. El menor valor de p a reportar es $p < 0.001$ y el mayor $p > 0.99$.

--Usar nombres genéricos para fármacos y equipos. Si piensa que es importante usar un nombre de producto, indique manufactura y lugar donde fue producido, entre paréntesis.

--Los símbolos genéticos aprobados, descripciones y equivalencias pueden encontrarse en www.genenames.org.

--Para mutaciones genéticas, ver sitio web HGVS (www.hgvs.org o <http://www.hgvs.org/rec.html>).

En la sección de resultados, describir los principales hallazgos de forma lógica, con especial mención a los datos relevantes que pueden estar contenidos en tablas o gráficos. Evite duplicar la información en tablas y gráficos.

En la sección de discusión, analizar los resultados en relación a la información previamente publicada y sus limitaciones, destacando los aspectos importantes del estudio que puedan concluirse en atención al diseño del estudio.

De acuerdo a la modalidad del manuscrito, el texto debe contener diferentes secciones:

--En los trabajos originales, debe incluir las secciones de: Introducción, Pacientes y métodos, Resultados y Discusión.

--En los casos clínicos, debe incluir las secciones de: Introducción, Descripción del caso y Discusión.

--En las revisiones, debe incluir las secciones de: Introducción y Desarrollo del tema.

Agradecimientos

El autor debe asegurar que se ha obtenido permiso de quienes se agradecerá.

Referencias

Los autores son responsables de la certeza de sus referencias y de su completa cita en el texto. No incluir más de 35 referencias, priorizando aquellas más relevantes. La cita de referencias, en el texto, figuras y tablas deben ser consecutivas como aparecen en el manuscrito, utilizando número superíndice.

En la lista de referencias, incluir apellidos e iniciales del nombre de todos los autores (si son más de 6, enumerar tres y agregar "et al"), el título, fuente (las abreviaciones de revistas están contenidas en el index medicus), año, volumen, número y rango de páginas.

--Para el estilo apropiado de referencias, consultar: American Medical Association Manual of Style: A Guide for Authors and Editors, 10th ed. New York, NY; Oxford University Press; 2007:39-79.

--Ejemplos.

Revistas (Impresas)

1. Rainier S, Thomas D, Tokarz D, et al. Myofibrillogenesis regulator 1 gene mutations cause paroxysmal dystonic choreoathetosis. *Arch Neurol*. 2004;61(7):1025-1029.

Revistas (Online)

2. Duchin JS. Can preparedness for biologic terrorism save us from pertussis? *Arch Pediatr Adolesc Med*. 2004;158(2):106-107. Available at <http://archpedi.ama-assn.org/cgi/content/full/158/2/106>. Accessed June 1, 2004.

3. Kitajima TS, Kawashima SA, Watanabe Y. The conserved kinetochore protein shugoshin protects centromeric cohesion during meiosis. *Nature*. 2004;427(6974):510-517. doi:10.1038/nature02312.

Capítulos

4. Bithell TC. Hereditary coagulation disorders. In: Lee GR, Bithell TC, Foerster J, Athens JW, Lukens JN, eds. *Wintrobe's Clinical Hematology*. Vol 2. 9th ed. Philadelphia, PA: Lea & Febiger; 1993:1422-1472.

Libros

5. Guyton AC. *Textbook of Medical Physiology*. 8th ed. Philadelphia, PA: WB Saunders Co; 1991:255-262.

Web

6. International Society for Infectious Diseases. ProMED-mail Web site. www.promedmail.org. Accessed April 29, 2004.

En caso de citar comunicaciones personales (orales o escritas) y datos no publicados previamente, citarlos entre paréntesis en el texto e incluir fecha. No anotar en las referencias y asegurar que se ha obtenido el permiso necesario. Evitarlos, si es posible.

Tablas

Numerar las tablas en forma consecutiva, en el orden de cita en el texto. Escribir a doble espacio, cada tabla en una página separada. Designar un título para cada tabla y definir todas las abreviaciones usadas en la tabla, en una nota al pie.

- Usar letras minúsculas superíndice (a-z) para las notas al pie de la tabla.
- No enviar tablas como imágenes.

Figuras

Se deben citar todas las figuras en el texto y numerarlas en el orden de aparición. En la leyenda de la figura, realizar la descripción correspondiente, en hoja aparte. Incluir

definiciones de cualquier abreviación que aparezca en la figura, permisos y cita apropiada.

- Usar símbolos superíndice (*, #, †) para las notas al pie de la figura.
- Para microfotografías, especificar tinción y magnificación original.
- Para cualquier figura con un paciente reconocible, debe contar con el consentimiento del paciente.
- Las figuras obtenidas de una fuente sin derechos de autor requieren permiso de la fuente de publicación, o bien ocultar facciones que permitan su reconocimiento.

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El uso de gráficos, tablas y figuras previamente publicados no está permitido, excepto cuando existe permiso formal para ello del autor original o de la fuente de publicación. La falta en la entrega de los permisos apropiados retrasará la publicación o necesitará la omisión de una figura o tabla en la cual no se ha recibido el permiso.

II. Secciones y Contenidos

Sección	Abstract	Nº palabras	Ref.	Figuras y tablas
Alerta	250 palabras	2000	35	Máximo 3
Buenas Prácticas Clínicas	250 palabras	2000	35	Máximo 3
Casos Clínicos	250 palabras	2000	35	Máximo 3
Campañas	250 palabras	2000	35	Máximo 3
Controversias	250 palabras	2000	35	Máximo 3
Cursos y Congresos	250 palabras	2000	35	Máximo 3
Editorial	-----			
Ética Médica	250 palabras	2000	35	Máximo 3
Estado del Arte	250 palabras	2000	35	Máximo 3
Farmacología	250 palabras	2000	35	Máximo 3
Guías y Protocolos	250 palabras	2000	35	Máximo 3
Investigación	250 palabras	2000	35	Máximo 3
Lectura Crítica	250 palabras	2000	35	Máximo 3
Links - Videos	250 palabras	2000	35	Máximo 3
Medicina Traslacional	250 palabras	2000	35	Máximo 3
Noticias	250 palabras	2000	35	Máximo 3
Perlas	250 palabras	2000	35	Máximo 3
Publicaciones CAS-UDD Estructurado	250 palabras	2000	35	Máximo 3
Quiz	-----	200		
Tips para publicar	250 palabras	2000	35	Máximo 3
Temas	250 palabras	2000	35	Máximo 3
Trabajos originales	200 + 50 plain language summary	2750	50	Máximo 3

III. Revision y Aceptación

Envío de revisiones

Reenvíe su artículo seguido con "R1" en caso de ser primera revisión o "R2" en caso de segundo análisis. Adjunte un breve comentario respondiendo a los alcances presentados por los revisores, una copia del texto con control de cambios y una copia con formato definitivo.

Recibirá un e-mail confirmando la recepción de los archivos corregidos.

Aceptación

Si su artículo es aceptado para publicación, éste debe ser editado en base a las normas dictadas en American Medical

Association Manual of Style: A Guide for Authors and Editors, 10th ed. New York, NY; Oxford University Press; 2007:39-79). El autor principal recibirá una copia diagramada en formato pdf para su visto bueno previo a publicación.

IV. Monografías

El último número de cada volumen estará destinado a un tema monográfico que incluirá Editorial, Introducción y al menos 6 artículos originales o de referencia, más un capítulo de conclusiones.

V. Conflictos de Interés

Potenciales conflictos de interés de los autores deben ser explícitos en el documento enviado para publicación.

