

medicina

BUENOS AIRES Vol. 82 Supl. V - 2022



medicina

BUENOS AIRES, VOL. 82 Supl. V - 2022

COMITÉ DE REDACCIÓN

Sebastián F. Ameriso <i>FLENI, Buenos Aires, Argentina</i>	Basilio A. Kotsias <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>
Pablo J. Azurmendi <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>	Gustavo Kusminsky <i>Hospital Universitario Austral, Buenos Aires, Argentina</i>
Damasia Becú Villalobos <i>Instituto de Biología y Medicina Experimental-CONICET, Buenos Aires, Argentina</i>	Oscar M. O. Laudanno <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>
Gabriela V. Carro <i>Hospital Nacional Prof. A. Posadas, Buenos Aires, Argentina</i>	Isabel A. Lüthy <i>Instituto de Biología y Medicina Experimental (IBYME), Buenos Aires, Argentina</i>
José H. Casabé <i>Instituto de Cardiología y Cirugía Cardiovascular, Hospital Universitario Fundación Favaloro, Buenos Aires, Argentina</i>	Jorge A. Manni <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>
Hugo N. Catalanó <i>Hospital Alemán, Buenos Aires, Argentina</i>	Domingo J. Palmero <i>Hospital de Infecciosas Dr. Francisco J. Muñiz</i>
Eduardo L. De Vito <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>	<i>Instituto de Tisiopneumología Prof. Dr. Raúl Vacarezza, Facultad de Medicina, UBA, Argentina</i>
Laura I. Jufé <i>Hospital General de Agudos J.M. Ramos Mejía, Buenos Aires, Argentina</i>	Guillermo B. Semeniuk <i>Instituto de Investigaciones Médicas A. Lanari, UBA, Argentina</i>
Isabel Narvaiz Kantor <i>Organización Panamericana de la Salud (OPS/OMS), Argentina</i>	Oswaldo J. Stringa <i>Hospital de Clínicas José de San Martín, UBA, Argentina</i>

MIEMBROS EMÉRITOS

Héctor O. Alonso <i>Instituto Cardiovascular Rosario, Santa Fe, Argentina</i>	Christiane Dosne Pasqualini <i>Academia Nacional de Medicina, Buenos Aires, Argentina</i>
María Marta de Elizalde de Bracco <i>IMEX-CONICET-Academia Nacional de Medicina, Buenos Aires, Argentina</i>	Rodolfo S. Martin <i>Facultad de Ciencias Biomédicas, Hospital Universitario Austral, Buenos Aires, Argentina</i>
Guillermo Jaim Etcheverry <i>Facultad de Medicina, UBA, Argentina</i>	La Tapa Maternidad Transgénica, 2007
Daniel A. Manigot <i>Hospital San Juan de Dios, Buenos Aires, Argentina</i>	Chino Benítez

MEDICINA (Buenos Aires) - Revista bimestral – ISSN 1669-9106 (En línea)

Registro de la Propiedad Intelectual N° 02683675
Personería Jurídica N° C-7497

Publicación de la Fundación Revista Medicina (Buenos Aires) Propietario de la publicación: Fundación Revista Medicina
Queda hecho el depósito que establece la Ley 11723

Publicada con el apoyo del Ministerio de Ciencia, Tecnología e Innovación Productiva.
MEDICINA no tiene propósitos comerciales. El objeto de su creación ha sido propender al adelanto de la medicina argentina.
Los beneficios que pudieran obtenerse serán aplicados exclusivamente a este fin.
Aparece en MEDLINE (PubMed), ISI-THOMSON REUTERS (Journal Citation Report, Current Contents, Biological Abstracts, Biosis, Life Sciences), CABI (Global Health), ELSEVIER (Scopus, Embase, Excerpta Medica), SciELO, LATINDEX, BVS (Biblioteca Virtual en Salud), DOAJ, Google Scholar y Google Books.
Incluida en el Núcleo Básico de Revistas Científicas Argentinas del CONICET.

Directores Responsables:

Basilio A. Kotsias, Eduardo L. De Vito, Isabel Narvaiz Kantor, Isabel Lüthy

Secretaría de Redacción: Ethel Di Vita, Instituto de Investigaciones Médicas Alfredo Lanari, Combatientes de Malvinas 3150,
1427 Buenos Aires, Argentina
Tel. 5287-3827 Int. 73919 y 4523-6619
e-mail: revmedbuenosaires@gmail.com – http://www.medicinabuenosaires.com

Vol. 82, Supl. V, Noviembre 2022

Diagramación y Diseño: Andrés Esteban Zapata - aez.sgi@gmail.com

REUNIÓN CONJUNTA SAIC SAI&FAIC SAFIS 2022

**LXVII REUNIÓN ANUAL DE LA
SOCIEDAD ARGENTINA DE INVESTIGACIÓN CLÍNICA (SAIC)**

**LXX REUNIÓN ANUAL DE LA
SOCIEDAD ARGENTINA DE INMUNOLOGÍA (SAI) &
3ER CONGRESO FRANCO-ARGENTINO DE INMUNOLOGÍA (FAIC)**

**REUNIÓN ANUAL 2022 DE LA
SOCIEDAD ARGENTINA DE FISIOLOGÍA (SAFIS)**

16-19 de noviembre de 2022
Hotel 13 de Julio – Mar del Plata

EDITORES RESPONSABLES

Dr. Daniel Alonso
Dr. Emilio Malchiodi
Dr. Martín Vila Petroff
Dra. Caroline Lamb

JOINT MEETING SAIC SAI&FAIC SAFIS 2022

**LXVII ANNUAL MEETING OF
SOCIEDAD ARGENTINA DE INVESTIGACIÓN CLÍNICA (SAIC)**

**LXX ANNUAL MEETING OF
SOCIEDAD ARGENTINA DE INMUNOLOGÍA (SAI) & 3RD
FRENCH-ARGENTINE IMMUNOLOGY CONGRESS (FAIC)**

**ANNUAL MEETING 2022 OF
SOCIEDAD ARGENTINA DE FISIOLOGÍA (SAFIS)**

November 16-19, 2022
13 de Julio Hotel – Mar del Plata

RESPONSIBLE EDITORS

Dr. Daniel Alonso
Dr. Emilio Malchiodi
Dr. Martín Vila Petroff
Dr. Caroline Lamb

tivation by its agonist, C21, prevented renal IR tubular epithelial cell damage in rats. Here, we found that C21 (1 mg/kg/day, i.p.) prevented the decrease in ICMT abundance in Wistar rats submitted to 40 min unilateral renal ischemia + 1 day of reperfusion (-55%, $p < 0.01$, $n = 6$). To simulate ischemia *in vitro*, MDCK cells were exposed to ATP depletion by incubation with antimycin A (10 μ M) and 2-deoxyglucose (10 mM). RT-qPCR studies showed that ICMT mRNA levels diminished in response to ATP depletion (-55%, $p < 0.05$). After 24 h of ATP restoration, ICMT mRNA decrease was recovered in accordance with the improvement of MDCK epithelial organization (as evaluated by actin and E-cadherin immunofluorescence confocal microscopy), suggesting that ICMT may cooperate to re-establish epithelial integrity. In addition, cell viability test by Trypan Blue exclusion showed that MDCK cells treated with Cysmethynil, an ICMT inhibitor, were more susceptible to ATP depletion (-50%, $p < 0.01$). This effect was prevented by C21 pretreatment. Collectively, our results suggest that ICMT is a relevant factor in the development of IR damage and may be involved in the renoprotective effects of C21.

621. (82) DISPENSATION OF VITAMINS AS MONODRUGS IN A UNIVERSITY SOCIAL SECURITY INSTITUTE, CORRIENTES 2021

Joaquín Burgos, María Teresa Rocha, María Eugenia Horna, Sergio Daniel Morales, Lorena Dos Santos Antola.
School of Medicine. National University of the Northeast

The aim of this study was to characterize the dispensation of medicines containing vitamins in monodrugs as active ingredient, in an university social security institute (first semester of 2021). An observational, descriptive, cross-sectional drug utilization study (DUS) was carried out. Data were obtained from the institution's pharmacy. Medications dispensed containing vitamins as monodrugs as active ingredients were included. Variables analyzed: age, sex and the quantity of vitamins as monodrug dispensed. To quantify the dispensation, the Daily Inhabitant Dose (DHD) was used, a unit of measurement recommended by the World Health Organization for the DUS. The DHD determines the number of people exposed per thousand inhabitants to a Defined Daily Dose (DDD) of the active ingredient analysed. The DDD is an statistical measure used for researchs and corresponds to the expected mean maintenance dose of a drug for its indication in adults. A total of 1,962 vitamins in monodrugs dispensations were included. Predominance of female patients (71.66%). Average age: 52 years (range: 0 to 93). Vitamin D 72.65 DHD, vitamin C 32.05 DHD, vitamin E 1.80 DHD, vitamin B12 0.97 DHD and vitamin K 0.13 DHD were dispensed. Regarding to the most dispensed vitamins, vitamin D was dispensed in 77.15% of cases for female patients, with a DHD of 56.49, and vitamin C in 61.32% of cases for female patients, with a DHD of 19.68. This study, where a high dispensation is observed fundamentally of vitamin D and C, points out the need to carry out interventions to determine the health situations of the affiliates that motivated those dispensations. Vitamins are micronutrients and with minimum quantity the recommended daily needs are covered. Its administration for prophylactic purposes has precise indications and; when they are administered for therapeutic purposes, they should be indicated after demonstrating their deficiency, to avoid adverse effects and an unnecessary increase in health costs.

622. (94) USE OF A NEW COMBINATION OF XYLAZINE-MIDAZOLAM FOR RATS SEDATION

Estefanía Magalí Zeni Coronel^{1,2}, Marina Soledad Bonanno^{1,3}, Mariana Seijo¹, Susana Noemí Zeni¹
¹Laboratorio de Osteopatías INIGEM-CONICET, FFyB-UBA, Hospital de Clínicas José de San Martín. Ciudad Autónoma de Buenos Aires (CABA), Argentina
²Cátedra de Bioestadística, FVet-UBA, Argentina
³Cátedra de Histología y Embriología, FO-UBA, Argentina

One of the most used and routinely established anesthetic modalities in rodents, is ketamine (K) combined with benzodiazepines; however, K induces secondary undesired effects, added to that its acquisition in Argentina is difficult due to being considered an abuse drug. To avoid these adverse, bureaucratic and economic obstacles,

we evaluated the possibility of replacing ketamine/xyzilazine (KX) by an anesthesia protocol that could provide a quick and effective surgical level of anesthesia and allow full access to the oral cavity. Wistar rats ($n = 24$) were subject to the application of saline solution 3 times a week and weekly replacement of the periodontal ligature (PL) under a combination of 20 mg X/Kg and 5 mg midazolam (M)/Kg. After 21 days, animals were sacrificed and soft organs (liver, kidneys and duodenum) were extracted for histology and pharmacological combination safety verification. The time for sedation (in seconds) was evaluated and compared against the KX combination. Results: average \pm SD (min-max): ataxia 113 ± 60 (62-325); lateral decubitus 164 ± 62 (76-359); foot reflex 306 ± 112 (129-537) and ocular reflex 527 ± 215 (145-1063). Mortality and respiratory distress were not observed. Ataxia marked the beginning of the induction period and was obtained after less than 2 ± 1 min compared to 8.8 ± 4.0 min with KX. After the completion of the dental procedure with XM, foot reflex recovery required 38 ± 14 min and ocular reflex 43 ± 19 min. Sedation lasted: 77 ± 10 min versus 20-40 min induced by intramuscular/intraperitoneal K/X (40-90 mg/kg/5-15mg/kg, respectively). Variability in depth of anesthesia was not observed in XM as compared to the marked variability observed with KX combination. Conclusion: Induction to the anesthetic plane was significantly shorter with XM than KX combination. The tested combination appears to be a suitable alternative to replace KX for minor oral procedures, as well as for longer surgical interventions due to its prolonged anesthesia effect.

623. (355) COMPARATIVE ANALYSIS OF THE BIOLOGICAL ACTIVITY OF DIFFERENT G-CSF ANALOGUES ON MOBILIZATION AND DIFFERENTIATION OF MURINE PLURIPOTENT BONE MARROW CELLS.

Materazzi L^{1,3}, Marvaldi C², Acebedo M^{1,3}, Giambalvo Gómez D^{1,3}, Ferraiolo P^{1,3}, Mazzei J^{1,3}, Diez RA³, Lombardi MG^{1,3}.
¹Laboratorio de Oncoinmunología Molecular, ²Laboratorio de Fisiopatología de la preñez y el parto; ^{1,2} Centro de Estudios Farmacológicos y Botánicos (CEFyBO)-CONICET, ³Segunda Cátedra de Farmacología, Facultad de Medicina, Universidad de Buenos Aires.

Granulocyte colony-stimulation factor (G-CSF) is a cytokine that promotes growth and maturation of neutrophil progenitor cells by interacting with a specific cell receptor (G-CSFR). It can also mobilize progenitor cells from the bone marrow into peripheral blood that can be used for hematopoietic reconstitution. In this work, we analysed two recombinant proteins produced by biotechnology based on the G-CSF gene that are used in clinical medicine: lenograstim (L; eukaryotic glycosylation) and filgrastim (F; non-glycosylated). Comparisons between these proteins are limited, but it is generally accepted that they function as full agonists of G-CSFR and have equivalent efficacy in their clinical capabilities. However, conflicting reports have emerged regarding the effects obtained with both forms of G-CSF. Here, we use a cytopenia model induced by a single dose of cyclophosphamide (300 μ g/g), in 12-week-old CD-1 mice. After 4 days, the G-CSF analogues were administered or not during 4 days (daily dose: 300 μ g/g). Then, a blood smear was performed and blood sample were collected. Labelling of peripheral blood mononuclear cells with an antibody against CD117 (c-Kit receptor) showed that F and L are able to significantly increase the quantity of circulating haematopoietic precursors, compared to control ($*p < 0.05$). In accordance, analysis of blood smears revealed the appearance of myeloid progenitors in the peripheral blood of G-CSF analogues treated mice. In addition, L significantly increased the % of neutrophils in the leukocyte formula with respect to control ($*p < 0.05$). Our results indicate that both G-CSF analogues present a comparable capacity to mobilize hematopoietic precursors into peripheral blood, so this effect would not depend on eukaryotic glycosylation. However, L also increased the presence of circulating neutrophils probably reflecting differences in the kinetics of the response; so further studies are required to evaluate the impact on these cell population.

624. (408) AZILSARTAN AMELIORATES VENTRICULAR HYPERTROPHY BY REDUCING OXIDATIVE STRESS IN OVARECTOMIZED RATS