2020

medicina

BUENOS AIRES VOL. 80 Supl. V - 2020

MEDICINA

Volumen 80, Supl. V, Págs. 1-207

medicina

BUENOS AIRES, VOL. 80 Supl. V - 2020

La Tapa (Ver p 5)
Ludueña, 2016
María Luján Álvarez

MEDICINA (Buenos Aires) - Revista bimestral – ISSN 0025-7680 (Impresa) – ISSN 1669-9106 (En línea)

REVISTA BIMESTRAL
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.
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Incluida en el Núcleo Básico de Revistas Científicas Argentinas del CONICET.

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e-mail: revmedbuenosaires@gmail.com – http//: www.medicinabuenosaires.com

Vol. 80, Supl. V, Noviembre 2020

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

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SOCIEDAD ARGENTINA DE FISIOLOGÍA (SAFIS)

November 10-13, 2020

RESPONSIBLE EDITORS
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sidered by testing (PCR swabbing). Digitized maps of RA and PSF were created with the Flourish Studio software since the SE when the first CP was registered until the SE-33. Weekly CP geolocation was carried out, per province in the RA maps and per city in PSF; the representative point was proportional to a reference point established according to the number of total PC. The data were obtained from daily reports from the RA and PSF Ministry of Health. Frackout! software was used to apply ABC. Median (M) and standard deviation (±) of DF and R^2 were obtained. Pearson's correlation coefficient (r) between both variables was considered. Outcomes: DF (RA): M = 0.94 ± 0.21; R^2 (RA): M = 0.97 ± 0.02; DF (PSF): M = 0.77 ± 0.25; R^2 (PSF): M = 0.96 ± 0.06. The Pearson coefficient was for: DF vs R^2 in RA: r = 0.92 (p = <0.0001), and for PSF: r = 0.76 (p = <0.0055). It is concluded that ABC reveals that COVID-19 in RA and PSF is adapted to environmental stressors; Until SE-33, no COVID-19 finitude was shown in the studied territories. This raises continuation and deepening of the study and of the external conditioning factors.

130. (330) **MOLECULAR CHARACTERIZATION OF A NEW SEROTONERGIC G-PROTEIN COUPLED RECEPTOR FROM CESTODES: NEW POTENTIAL TARGET FOR DRUGS AGAINST NEGLECTED TROPICAL DISEASES**

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Introduction: *Echinococcus canadensis* is a platyhelminth parasite that belongs to the class Cestoda and is the etiological agent of Hydatid disease, a neglected disease that affects public health and economy in Argentina and worldwide. Currently, the treatment for echinococcosis in humans relies on benzimidazoles. However, the emergence of resistant parasites, makes the discovery of new anthelmintic drugs an imperative need. To tackle this problem, we propose to characterize G-protein coupled receptors from cestodes as new pharmacological
targets. In our previous work1, we found that serotonergic GPCRs (5-HT GPCRs) are of major importance in cestode movement and showed distinctive pharmacology. **Objective**: the aim of this work was the bioinformatical characterization, function and localization of a new 5-HT GPCR from *Echinococcus canadensis*. **Material and methods:** Bioinformatics analyses suggest the existence of genes encoding 5-HT GPCRs. Using this information, a novel cDNA coding for a new 5-HT GPCR was cloned, sequenced and expressed in HEK293 cells. Intracellular levels of calcium were measured. Hyperimmune antiserum was generated against the receptor protein and confocal laser microscopy was used to study the localization of the receptor. **Results:** When the cell line was transfected with a gene encoding for the receptor, the calcium levels increased only in the presence of serotonin but not with of other biogenic amines. Whole mount immunofluorescence revealed branched fibers corresponding to the nervous system of the worm. **Conclusion:** The dataset confirms the bioinformatic analyses showing that the cloned gene codes for a new 5-HT GPCR conserved in cestodes with major roles in the nervous system of the parasite. The molecule analyzed here could be exploited at the pharmacological level to design or repurpose drugs to treat neglected diseases caused by cestode parasites.

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131. (331) **ELIGLUSTAT AS A POSSIBLE STRATEGY TO PREVENT THE DETRIMENTAL EFFECTS OF SHIGA TOXIN TYPE 2: PRELIMINARY RESULTS *IN VIVO***

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Typical Hemolytic Uremic Syndrome (HUS) is a complication of Shiga toxin (Stx)-producing *Escherichia coli* (STEC) infection and the most frequent cause of acute renal failure in children in Argentina. Stx2 binds to globotriaosylceramide (Gb3) receptor and causes direct damage on human renal microvascular endothelial cells (HGEC). Previously, we found that Eliglustat (EG), a Gb3 synthesis inhibitor, prevents the cytotoxic effects of Stx2 on HGEC. In this work, we evaluated the action of EG against the effects of Stx2 *in vivo*. Male BALB/c mice at weaning (17-21 days) received 3 doses of EG (0.6 mg/g body weight (bwt) administered intraperitoneally (i.p.) every 24 h. After a rest period of 5 days, mice were i.p. injected with a lethal (1ng/g bwt) or sublethal (0.1 ng/g bwt) dose of Stx2 (EG+Stx2) or PBS (EG). Two additional groups of mice without EG pre-treatment were injected one with PBS (Ctrl) and another with Stx2 (Stx2). Survival, body weight (Δ weight= body weight after Stx2 or PBS injection-body weight at a day before injection) and food intake were registered daily. EG did not affect body weight gain (Δ weight: EG: 0.61 ± 0.07 g *vs*. Ctrl: 0.76 ± 0.09 g; n=3, ns). After Stx2 lethal dose treatment, EG+Stx2 mice showed a body weight decrease and a survival time (48-72 h) similar to Stx2 mice. On the contrary, after 3 days of Stx2 sublethal dose injection, while Stx2 mice exhibited piloerection and inactivity and body weight loss, EG+Stx2 mice did not show signs of illness and gained weight (Δ weight: EG+Stx2: 0.81 ± 0.09 *vs*. Stx2: -0.65 ± 0.05 g; n=3, p<0.05). Body weight loss in Stx2 mice was associated with a significant decrease (70%) in food intake, unlike EG pre-treated mice that reduced intake by only 15% (n=3, p<0.05). These results suggest that EG may reduce the disease symptoms caused by Stx2, such as poor appetite and the resulting body weight loss. Future studies will analyze if EG prevents the renal damage and will improve EG treatment to avoid mortality.

132. (364) **BENZHYDROXAMATE DERIVATIVES ARE POTENTIAL ANTHELMINTIC DRUG AGAINST NEGLECTED TROPICAL DISEASES CAUSES BY CESTODES**

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Neglected tropical diseases (NTDs) caused by cestodes, such as echinococcosis and cysticercosis, represent a serious public health problem in many countries; including Argentine. These diseases have a reduced number of safe and efficacious approved anthelmintic drugs; therefore, the identification of novel drug candidates is urgently required. In this work, we present the anthelmintic profile of several series of recently developed selective histone deacetylase (HDAC) inhibitors (benzhydroxamate derivatives) against the isotype 8, using the model cestode *Mesocestoides vogae* (syn. *M. corti*). Phenotypic screenings were performed measuring parasite motility together with optical microscope observations. Several compounds showed potent anthelmintic activities, producing a significant reduction on parasite viability and inducing extensive alterations on general morphology. Two of these compounds, TH65 and TH92,