

their potentiation. Pharmacogenetic testing (PT) may help the individualization of therapeutic process, aiming towards higher efficacy and reducing toxicity. This constitutes a case report study, in which we reviewed the electronic medical records of 20 (18 to 85 y.o) patients who underwent PT in the context of therapeutic failure or toxicity. The allelic variants of CYP2D6, and CYP2C19 as well as the serotonin transporter SCL6A4 were analyzed. The aim of this work was to be able to evaluate if the results modified the behavior taken by the professionals who had requested them, or if they had been taken into consideration in the established treatment. The results showed that, from the medical records that were followed up, only in 6 cases were the test results recorded by the treating professionals, and involved a change in the treatment behavior. We identify obstacles in the implementation of pharmacological therapeutic plans according to the results of pharmacogenomic studies, the lack of communication being the main cause. This initial experience depicts the hurdles of requesting and implementing PT guidance for therapeutic approach in the context of prevalent mental illnesses in Argentina. Availability of the tests is not enough for successful implementation; we should rather aim towards day-to-day collaborative work between Psychiatrists and Clinical Pharmacologists.

0343 - TOWARDS A BETTER METHOD OF CANNABINOID EXTRACTION AND PRESERVATION FOR CANNABIS-BASED PRODUCTS

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Abstract/Resumen: Although cannabis is widely consumed for medicinal purposes, little is known about its content. In Bahía Blanca city, Argentina, we observed that 3.4% of 59 analysed cannabis oils failed to contain delta-9-tetrahydrocannabinol (THC), cannabidiol (CBD) and cannabinol (CBN), and that 89.5 % had more THC than CBD. Several reports highlight the importance of quantifying cannabinoids in medicinal products in order to use an appropriate concentration. Here, we aimed to study the extraction, quantification and storage of the different cannabinoid products. To this end, cannabis female flowers were grinded and heated (115°C, 40 min) to decarboxylate acidic cannabinoids. Extractions were performed by adding 5 % (w/v) ethanol, vortexed, sonicated, and agitated by a shaking platform. The mixture was centrifuged and the supernatant was evaporated under stream of N₂. Resin, ethanol and oil preparations were stored at different temperatures and/or containers for up to 60 days. THC, CBD and CBN content was quantified by HPLC. Ethanol extracts from plants harvested in winter showed a 123 % increase in THC+CBN content with respect to a clone harvested in summer (p<0.05). The extraction method allowed obtaining 72, 24 and 4% of THC in the first, second and third extraction, respectively. Storage evaluation showed no changes in THC or CBD content when cannabis oils were kept at 25, 4 and -20°C in plastic tubes and ethanol extracts in glass at -20°C for up to 60 days. However, at 4°C, THC content decreased (13%) at day 30 (p<0.05). On the other hand, ethanol extracts stored in plastic showed a decrease of THC at day 30 either at 4°C (17%) or at -20°C (14%) (p<0.05). In resins stored either in plastic or in glass, THC also decreased (14 and 10%, respectively) at day 30 (p<0.05). Our results show that although the extraction method employed is suitable to obtain different cannabinoid preparations, it is important to choose the appropriate storage method.

0354 - ASSESSMENT OF RITUXIMAB ADVERSE EVENTS IN PEDIATRIC DISEASES

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Abstract/Resumen: Biological products are part of the targeted therapy used in several pediatric pathologies. Specifically, rituximab is a chimeric monoclonal antibody that binds to the CD20 antigen on the surface of mature B-lymphocytes, inducing cell depletion. Due to the increased use of this drug in pediatric patients and the limited information about its safety, the aim of this study was to evaluate Adverse Drug Reactions (ADRs) to rituximab in patients with chronic and complex diseases at Hospital de Pediatría JP Garrahan. We carried out active pharmacovigilance since March 2019 and we prospectively evaluated ADRs of rituximab in pediatric patients with transplant, oncological, hematological, immunological and neurologic pathologies, as part of an interdisciplinary project. The causality of ADRs was established using the Naranjo Algorithm. Moreover, ADRs were classified according to severity as mild, moderate, serious or lethal, and according Common Terminology Criteria for Adverse Events (CTCAE) v5.0. We analyzed 70 infusions given to 31 patients of (median, range) 12.3 years (1.9-18.7), with oncological diseases (n=5), immunological pathologies (n=11), solid organ transplantation (n=9) and neurologic diseases (n=6). Seventeen ADRs to rituximab were observed including fever (n=3), hypersensitivity reactions (n=8), hypotension (n=1), hypertension (n=2), hypogammaglobulinemia (n=2), and tachypnea (n=1). 94% of the ADRs were defined as probable or definite and 77% were moderate or severe. Two patients had severe ADR during the infusion that required its interruption. Grade 3 and 4 cytopenias [neutropenias (n=5) and thrombocytopenias (n=3)] were observed in patients with leukemia and lymphoma (n=5) during simultaneous treatment with chemotherapy. Rituximab administration may be associated with ADRs but are all clinically manageable. Thus, it is important to implement a program of pharmacovigilance to generate evidence and solid scientific data to support clinical decisions.

0357 - OPTIMIZATION OF THE EXTRACTION OF PHYTOMETABOLITES WITH ANTIOXIDANT AND ANTI-INFLAMMATORY PROPERTIES FROM LEAVES OF CASEARIA SYLVESTRIS

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Abstract/Resumen: Casearia sylvestris Sw. is a widely distributed tree in South America. In Brazil's popular medicine, the use of this plant is correlated with its pharmacological properties including anti-inflammatory, anti-ophidian and anti-ulcer activities. However, the development of a separation technique of bioactive compounds in the herbal extracts is particularly difficult, due to the high complexity of the matrix. The objective of this work was to determine the optimal conditions for the extraction of bioactive compounds with the software Design-Expert® 11, using a mixture design of three solvents (water/ethanol/acetone). Leaves of C. sylvestris were collected in Paso de la Patria (Corrientes, Argentina). The samples were dried, powdered and extracted by maceration under agitation for 2 days in the corresponding solvent. The extracts were filtered and concentrated under reduced pressure. Total phenolic, flavonoids and tannins contents were measured using Folin-Ciocalteu, aluminum trichloride and vanillin methods respectively. Antioxidant activity (AOA) was determined by DPPH and FRAP assays. In vitro anti-inflammatory activity (AIA) was investigated by the hypotonic hemolysis inhibition method. Ten different mixtures were evaluated by response surface