Background: A new legal development came into action on January 2016 to align the tasks and workflow of Research Ethics Committees (REC) with the Regulation EU 536/2014. We will show how our Hospital and our REC has adapted to the new rules.
Methods: There are 125 REC in Spain. For each study, only one REC is responsible for issuing an opinion on the clinical trial (CT) application dossier. The RECs of other centres involved in the study are not entitled to contribute to the evaluation. This new paradigm implies that the REC responsible of the evaluation has to deal with local issues of each centre like investigator and facilities suitability. This new system requires a considerable harmonisation effort in order to secure that a reasonable consistent approach is adopted and that criteria for the evaluation of CT do not substantially differ between RECs. In early 2015 AEMPS set up a Clinical Trial Coordination Group (CTCG) chaired by the Head of Human Drugs Sector of the AEMPS and one member of each of approximately 25 RECs with higher experience in the evaluation of CT applications. Monthly meetings are held.
Results: We have created a Thecnical Secretary for Supporting the Research (TSSR) which includes a multidisciplinary working group in charge of:

- Supporting the signature of the facilities suitability form of our centre.
- Hospital Clínic research activity register.
- Methodology, regulatory and ethical support to the investigators.
- Supporting to the Technical Secretary of the REC.
- Accelerating contract signature and other administrative procedures.

Conclusions: The TSRS will allow us:

- To know about the research activity in the Hospital, although our REC is not the one that evaluated the dossier.
- To speed up bureaucratic procedures.
- Keep the budget for the REC activities.

FAILURE TO VALIDATE PADUA SCORE'S ABILITY TO PREDICT THE RISK OF VENOUS THROMBOEMBOLISM IN MEDICAL PATIENTS

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Background: Medical patients are at risk of developing venous thromboembolism (VTE) over the course of their hospitalization and for an additional 30 days. One of the widely accepted models to predict the risk of VTE in medical patients is the Padua Prediction Score. In the validation study of the Padua score, 11% of the high risk patients experienced VTE within 90 days as opposed to 0.3% of the low-risk patients. Prophylaxis with anticoagulants for high-risk patients reduced the incidence of VTE to 2.2%. This study was designed to verify the Padua Prediction Score's ability to predict the risk of VTE in medical patients and show the benefit of prophylactic anticoagulant treatment in high-risk patients.
Methods: In this retrospective cohort study, data was gathered from a random sampling of medical patients files hospitalized between 1.1.2014-30.6.2014. These patients had a Padua Score of 4 and above, had no other indication or contraindication for enoxaparin treatment. A search for diagnoses of death, PE (pulmonary embolism) or DVT (deep vein thrombosis) occurring over the course of 90 days from the date of hospitalization was conducted on the hospital and HMO information systems, or directly with patient or family doctor.
Results: The study included 568 high risk patients with a Padua Score of 4 and above, of whom 284 were treated with prophylactic enoxaparin and 284 were not.

There were no VTE events over the course of 90 days in either group. The rate of all-cause mortality and major bleeding did not differ between groups.

Conclusions: The incidence of VTE was significantly lower than reported in the Padua study. No association was found between administration of prophylactic enoxaparin and prevention of VTE events. The comprehensive guideline for treating patients with a Padua Score of 4 and above with prophylactic LMWH should be reexamined.

ALLOPURINOL-INDUCED DRESS SYNDROME: COMPARISON BETWEEN CURRENT DIAGNOSIS PROTOCOLS, TREATMENT AND FOLLOW UP. (A CASE REPORT)

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Background: Often referred to as drug reaction with eosinophilia and systemic symptoms (DRESS), is a life-threatening multi-organ system reaction induced by drugs and associated with sequential reactivations of herpesviruses. This syndrome has several unique features. Characterized by a long latency between drug exposure and disease onset, a prolonged course with frequent relapses despite the discontinuation of the responsible drug. Allopurinol is a commonly prescribed medication, which is associated with this clinical entity.
Case Report: A 52-year-old female patient diagnosed with acute gout and treated with 100mg of allopurinol once daily, 10 days after initiating treatment is admitted for developing generalized maculopapular rash, facial oedema, fever (39.3ºC), eosinophilia, acute renal failure and hypertransaminasemia. The drug is discontinued, treating the patient with prednisone. Five days later the rash and fever remitted, analytical results returned to normality and the patient was discharged. Additional laboratory tests revealed Epstein-Barr virus activation, HLA-B*58:01 and ANA were negative. Following the current diagnostics protocols the score gave the diagnostic of atypical DIHS (J-SCAR) and definite DRESS (RegiSCAR) respectively.
Pathogenesis: DRESS is a type IV drug-induced hypersensitivity reaction, why a positive lymphocyte transformation test can only be observed at the resolution stage, but not at the acute stage? Regulatory T cells expansion at the acute stage may give an important clue to the mechanisms.
Outcome: Regulatory T cells are expanded at the acute stage, but upon clinical resolution their function become gradually defective. Because such a gradual loss of function after resolution of DRESS this could increase the risk of developing autoimmune sequel.
Conclusions: As DRESS is a rare life-threatening clinical entity, early diagnosis, cessation of the offending medication and supportive care are the main pillars of this disease´s management. Stablishing structured diagnosis protocols may shorten inpatient days. Better research of the pathogenesis may prevent generation of autoimmune responses.

IMPACT OF AN EDUCATIONAL INTERVENTION ON KNOWLEDGE AND ATTITUDE RELATED TO ADVERSE DRUG REACTIONS REPORTED BY PHYSICIANS IN AN UNIVERSITY HOSPITAL

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Background: Underreporting of advers drug reactions (ADRs) by physicians is a common problem. The purpose of this study was to assess the impact of an educational intervention on physicians' knowledges and attitudes related to spontanaeus ADRs reporting.
Methods: A cross-sectional, questionnaire-based study was conducted. Sixty minutes training about pharmacovigilance (PV) and ADRs reporting was given in total 203 physicians, in an university hospital. Before the training, a questionnaire consisting of 19 items was administered to determine the baseline knowledge level of the physicians about PV and the same questionnaire was repeated one year after the training.
Results: In total 91 physicians participated to second survey, participation rate was 44.8%. Seventy nine physicians of 91, who completed all item in the survey, were included in the study and their responses were compared with their previous responses. Thirty one of the 79 physicians had academic degrees. In the responses to the post-training questionnaire, it was observed that the level of knowledge of participants significantly increased in the sections on what to report and how to report the ADRs. However, there were no significant differences between the academicians and the non-academicians in terms of the responses given to the survey before and after the training. In the first survey, 12 of 79 participants reported that they had previously reported ADRs, while 14 participants reported ADRs after training. Additionally, training increased physicians' awareness about the national PV center and PV liaison of their institution.
Conclusions: Training increased clinicians' knowledge levels of PV, but not their reporting rate of ADRs. One hour training may not be enough to make a change on physicians' ADR reporting attitudes and it may be repeated during their professional practice regularly.

THE ANALYSIS OF THE FALLS OF PATIENTS IN A REHABILITATION FACILITY

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Background: The risk of falling rises with the number of used risk drugs and with appearance of other risk factors associated with falls. The research goal was to analyze the patients who have fallen during the certain period and assess effects of pharmacotherapy and other factors associated with falls. Moreover, in the study drug related problems (DRP) not related with falls were revised.
Methods: The data of this retrospective cross-sectional observational study were obtained from the patients who fell during hospitalization in the health-care facility providing rehabilitation care from 1st of December 2014 to 31st of December 2015. Available data describing fall, personal and drug anamnesis were analyzed. The analysis of the data was aimed to identify risk factors, diagnosis and other risk factors which could be related with falls. Based on prepared overview of risk drugs the potential and individual risks for each patient were determined. The individual risk was demostrared by drugs with increased risk of falls either by mechanism of action or by circumstances of the fall in which the drug cause might not be excluded. The other DRP were analyzed and classified. The results were described by descriptive statistics.
Results: 207 falls distributed in 53% women were identified during a revision of data. The median age was 71 ± 13.6 years. The potential risk drugs were 4.55 and individual risk drugs was 0.74 per patient on average. The most frequent risk group was cardiovascular drugs and the most frequent risk diagnosis was arterial hypertension.
Conclusions: The presence of a clinical pharmacist can be a tool to eliminate any potential errors in pharmacotherapy that can be one of the reasons leading to the falls.
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EVALUATION OF SERUM DIGOXIN LEVEL IN DIABETIC PATIENTS IN A 5 YEAR RETROSPECTIVE COHORT STUDY

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Background: It has been reported that diabetic conditions may alter the expression of P-glycoprotein (P-gp) or its functional activity, and therefore affecting the pharmacokinetic properties of drugs which are P-gp substrates. The aim of this study was to investigate whether the serum level of digoxin, a P-gp subtype, is different in diabetic patients by controlling the effect of other covariate variables.
Methods: This is a retrospective cohort study evaluating the data measured in the first day of admission to the hospital of patients treated with oral digoxin, who were hospitalized in a university hospital between January 2011 and December 2015. General linear model (GLM) was used for analysis. In this model, digoxin level is dependent variable and diabetes mellitus is fix factor, while age, gender, BUN, creatinine and potassium levels are covariate. $P < 0.05$ was accepted as statistical significant.
Results: In this study, total number of hospitalizations was 2974 and DM ratio was 10.7% (n=319). The mean age was 73.1 ± 13.0. The serum digoxin concentration in diabetic patients was calculated as 0.9 ± 0.8 ng/mL (0-4.7ng/mL), and 1.01 ± 1.0 ng/mL (0-15ng/mL) in the non-diabetic patients. In GLM analysis, in the presence of diabetes it was found that digoxin levels decreased significantly ($p = 0.016$) and other covariate variables such as age, gender, potassium, creatinine and BUN significantly affected the serum digoxin level (P values are $p=0.004$, $p<0.001$, $p<0.001$, $p=0.002$, $p=0.012$, respectively).
Conclusions: We found that serum digoxin levels decreased in the presence of diabetes. However, further research is needed to determine whether low serum levels of digoxin in diabetic patients are associated with an increase in P-gp expression due to diabetic conditions.

MONTE CARLO SIMULATION OF DORIPENEM IN PATIENTS ADMITTED TO INTENSIVE CARE UNIT

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Background: Doripenem (DRPM) is a broad-spectrum antibacterial agent often used as empirical therapy for critically ill patients, although there is a lack of studies validating the recommended dosage regimen for patients admitted to intensive care unit (ICU), based on pharmacokinetic (PK) /pharmacodynamic (PD) index.
Methods: In this study, we performed Monte Carlo simulation of DRPM using Bayesian-estimated PK parameters of 12 patients in ICU, and evaluated the validity of the dosage regimen stratified by creatinine clearance into three grades of renal function.
Results: Using a 2-compartment population PK model reported previously, the mean total clearance or distribution volume of DRPM estimated by Bayesian estimation was significantly lower or higher than that of based on population PK model. The estimated