

demographic and clinical covariates. **RESULTS:** Of the eligible 225,720 adult men with CKD, 14% patients received testosterone treatment. Median follow up time was 1,296 days for men on TRT and 722 days for men who did not receive TRT. After controlling for baseline covariates, the combined incidence of MI and stroke was 31% lower in men who received TRT (aHR: 0.69, 95%CI: 0.66-0.73). The incidences of CHF (aHR: 0.72, 95% CI: 0.70-0.74), coronary artery stents (aHR: 0.80, 95% CI: 0.65-0.99), and coronary artery bypass surgery (aHR: 0.76, 95% CI: 0.62-0.95) were also lower in men who received TRT. The incidence of secondary polycythemia did not statistically differ between the study groups (aHR 1.18, 95% CI: 0.93-1.49). No men were diagnosed with incident prostate cancer during the follow-up period. **CONCLUSIONS:** The study suggests that TRT may decrease cardiovascular events in men with CKD stages 4 and 5. Randomized controlled trials of testosterone replacement in men with CKD are needed to establish the cardiovascular effects of TRT in these men.

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LOW BIRTH WEIGHT IN NEWBORNS AND ASSOCIATED MATERNAL AND NEONATAL FACTORS IN A COLOMBIAN GINECO-OBSTETRICAL HOSPITAL

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OBJECTIVES: To determine the prevalence of Low Birth Weight (LBW) in newborns treated at the Rafael Calvo Maternity Clinic (CMRC) during 2016 and their possible maternal and neonatal factors associated. **METHODS:** Cross-sectional retrospective observational study with a population of 7,217 pregnant women who had a live birth in the CMRC. The prevalence of total and term (≥ 37 gestation weeks "GW") LBW were estimated from the weight of the newborn. Risk factors associated with LBW were estimated through a logistic regression model. Modeled variables were weight, maternal age, prenatal control, mother's education level, area of residence and multiplicity of pregnancy. Statistical significance was defined in 5% and 10%. **RESULTS:** The prevalence of total and term LBW in the CMRC were 11.6% (838 cases out of 7,217) and 4.2% (259 out of 6,203) respectively. The risk of LBW is 16.6% ($p=0.061$) and 37.0% ($p=0.044$) lower in mothers between 20 and 34 years and 35 years or more respectively, than in mothers under 20. A child born at term represents a lower risk ($\beta = 0.03$, $p=0.000$) of LBW than a pre-term (<37 GW). Mothers with controlled pregnancy (4 or more prenatal visits) have a lower risk ($\beta = 18.6\%$, $p=0.042$) to have a baby with LBW than mothers who are not controlled. Expecting two or more children in the same pregnancy increases the risk ($\beta = 3.3$, $p=0.000$) of LBW compared to expecting a single child. Living in urban areas decreases the risk of LBW by 21% ($p = 0.057$) compared to living in rural areas. **CONCLUSIONS:** We found significant low birth weight in newborns in the CMRC. The prevalence of total LBW (11.6%) was above figures for Colombia (9.0%) and Cartagena (8.9%) in 2015. Controlling the risk factors associated to LBW could be favorable for its reduction.

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EVALUATION OF POTENTIALLY INAPPROPRIATE MEDICATIONS AND CLINICAL OUTCOMES IN OLDER ADULTS ADMITTED TO THE MEDICAL INTENSIVE CARE UNIT

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OBJECTIVES: To comparatively assess the potentially inappropriate medications (PIMs) use and its impact on clinical outcomes among older adults admitted to intensive care unit (ICU) using three different screening criteria for PIMs. **METHODS:** The analyses included 346 US older adults (≥ 65 years) admitted to the medical ICU of DCH Regional Medical Center in 2014. PIMs were identified using Beers Criteria (2015 and 2012 versions) and Screening Tool of Older People's Potentially Inappropriate Prescriptions (STOPP). The proportions of PIM use at admission and discharge, and proportions of in-hospital mortality and ICU/hospital readmission among patients with PIM use were compared among the three criteria using Chi square test. Multivariate Poisson regression models assessed the associations of PIM use with hospital and ICU length of stay. Statistical significance was considered at $P < 0.05$. **RESULTS:** The proportions of PIMs identified through three different criteria (at admission: 10.2%, 8.1%, and 5.3%; and at discharge: 9.8%, 7.4%, and 4.4% using 2015 Beers, 2012 Beers, and STOPP, respectively) were significantly different from each other (2012/2015 Beers vs. STOPP, $P < 0.01$). PIM use at admission measured by STOPP was significantly associated with longer ICU stay (RR=1.24; 95% CI: 1.11-1.38) and hospital length of stay (RR=1.24; 95% CI: 1.16-1.33). However, PIM identified through the Beers Criteria (2015 and 2012 versions) were associated with shorter ICU and hospital length of stay. No differences were found in proportions of in-hospital mortality, ICU/hospital readmission among patients with PIM identified through three different criteria. **CONCLUSIONS:** Although the Beers Criteria demonstrated the ability to identify PIMs more frequently, patients with PIMs identified using the STOPP were associated with longer ICU and hospital length of stay. Our findings indicate that clinical interventions aiming to reduce PIMs identified by the STOPP at inpatient/ICU settings might help shorten patient's inpatient/ICU length of stay.

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VENO-OCCLUSIVE DISEASE (VOD) ASSOCIATED WITH GEMTUMZAMB OZOGAMICIN (GO) AND INOTUZUMAB OZOGAMICIN: ANALYSIS OF THE FDA ADVERSE EVENT REPORTING SYSTEM

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OBJECTIVES: To explore the frequency of veno-occlusive disease (VOD) associated with Gemtuzumab Ozogamicin (GO) or Inotuzumab Ozogamicin using the FDA database. **METHODS:** The primary data source is FDA adverse events reporting

system (FAERS) database. A retrospective descriptive analysis was conducted to explore the frequency of VOD in all patients who had taken GO and Inotuzumab Ozogamicin and reported adverse event to FDA from 2000 to 2016. Our study focused mainly on reports of VOD associated with the use of either "Gemtuzumab ozogamicin" or "Inotuzumab ozogamicin". **RESULTS:** A total of 200 adverse reports of VOD were retrieved from FAERS database. Of these, 159 (79.5%) were for GO and 41 (20.5%) for Inotuzumab Ozogamicin. The death reports because of using GO from 2001 to 2016 is 89 reports. In 2003, the death represents the highest number of VOD reports which is 18. In 2005 and 2011 the reports were 13 and 11 respectively. The life-threatening due to VOD in 2004 and 2006 represent 8 and 15 reports respectively. The hospitalization reports are more than 15 reports in 2003 and 2006. The death reports of VOD due to exposing to Inotuzumab Ozogamicin from 2010 to 2016 is 17 reports. There are seven reports of death in 2014. In 2015 the reports were 4 while in 2016 were 3. The role of GO as a primary suspected drug from 2002 to 2007 is high while as a secondary it is low. The role of Inotuzumab ozogamicin as primary suspected drug from 2010 to 2016 is negligible, while as a secondary it represents 35 reports from 2014 to 2016. **CONCLUSIONS:** VOD occurs more in patients who is using GO than Inotuzumab Ozogamicin. Further studies are needed to investigate the occur of VOD is due to stem cell transplantation (SCT) or these two medications.

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INCIDENCE OF SUBSEQUENT LUMBAR SURGERY FOLLOWING POSTERIOR LUMBAR FUSION

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OBJECTIVES: A procedural revision is a common event after an index posterior lumbar spinal fusion (PSF). However, there is little evidence on the characterization of any subsequent lumbar surgeries following index PSF. This study evaluates the incidence of and potential influencing factors associated with subsequent surgeries in the lumbar spine (SSLS) following PSF. **METHODS:** Patients with ICD-9/10 codes for PSF of 1-2 spinal levels were identified in the Premier Healthcare Database®, 2013-2016. Patients were required to be from hospitals that continuously contributed data to the database for at least one year after index PSF. Patients' demographics as well as clinical, procedural, hospital, and provider characteristics were collected and analyzed. The incidence of any SSLS within one year after PSF was estimated. Potential factors associated with SSLS were evaluated using logistic regression. **RESULTS:** 67,372 patients were identified. The majority of patients were female (56.1%), between the ages of 65-74 (28.9%), 80.4% were white, 59.7% were married, 46.9% had Medicare insurance, 91.4% had surgery at urban centers, and 54.2% at teaching hospitals. SSLS occurred in 2.10% of patients; 1.96% of patients returned for a PSF of 1-2 levels, while 0.27% returned for PSF of 3 or more levels, anterior fusion or non-fusion procedures. Variables associated with higher odds of SSLS included hospitals with 400-499 beds versus 500+ beds (adjusted Odds Ratio (OR); 95% Confidence Interval (CI): 1.3; 1.1, 1.6), history of hypertension (1.15; 1.0, 1.3), history of neurological disorder (1.8; 1.4, 2.3) and history of rheumatoid arthritis (1.3; 1.1, 1.7), while age 75+ (0.66; 0.52, 0.84) and commercial insurance versus non-commercial (0.78; 0.69, 0.89) decreased the odds. **CONCLUSIONS:** Following PSF of 1-2 levels, most patients returning for SSLS undergo the same procedure as the index surgery. A combination of hospital and patient factors are associated with odds of SSLS.

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INCIDENCE OF MALIGNANT NEOPLASM FOR PATIENTS USING BIOLOGIC DRUGS: A NESTED CASE-CONTROL STUDY USING MEDICARE 5% SAMPLE DATASETS

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OBJECTIVES: Biologic drugs have been changing the clinical management of various diseases such as cancer and autoimmune diseases. Although biologic drugs are expected to play critical roles, their association with the development of malignant neoplasms (MN) remains unclear. We examined the relationship between prescription of biologic drugs and incidence of MN based on a claims database analysis. **METHODS:** We performed a nested case-control study using Medicare 5% Sample data (2011-2016). Among the insureds with full exposure in 2011, those with neither diagnosis with MN nor prescription of biologic drugs in 2011 were extracted. Cases were individuals having diagnosis of MN in 2012 or later. Controls were selected from the extracted patients without diagnosis of MN, and matched with the cases by sex, age, and end of the eligible period. Within the period from January 1, 2012 to the day before earliest diagnosis of MN in cases, percentage of individuals being prescribed biologic drugs was calculated for both cases and their matched controls. **RESULTS:** Among 675,922 individuals extracted from the dataset, 283,198 cases were identified. Matched individuals analyzed in this study were 277,638 (55.3% were female, average \pm standard deviation age was 72.8 ± 8.6) in each group. Percentage of individuals being prescribed biologic drug was significantly higher ($p < 0.0001$) in cases, 1.17%, than in controls, 0.91%. Exudative senile macular degeneration was the most common diagnosis given to patients on the day of biologic drug prescription, followed by senile osteoporosis, osteoporosis, unspecified, rheumatoid arthritis, and venous tributary occlusion. **CONCLUSIONS:** Our result suggests association between taking biologic drugs and development of MN. Due to the difficulty to conduct a RCT, this result could be important by furnishing one source of circumstantial evidence. Detailed real-world data analyses considering the type of MN and the duration of the treatment by biologic drugs should be conducted.

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ECONOMIC EVALUATION OF ENTEREX® IMX, A SPECIALIZED NUTRITION SUPPLEMENT CONTAINING ARGININE, IN THE TREATMENT OF NEUROCRITICAL PATIENTS IN MÉXICO

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