OBJECTIVES: Automated peritoneal dialysis (APD) has been increasingly used since pay-per-treatment schemes were introduced to cover APD machine in addition to the continuous ambulatory peritoneal dialysis (CAPD) in the benefit package of National Health Insurance Program in May of 2008. This study aims to compare the health outcome between patients who used APD and CAPD. METHODS: The including criteria were patients treated by APD or CAPD identified in National Health Insurance Research Database (NHIRD) during 2001-2010. The excluding criteria were patients who were treated by hemodialysis for more than 3 months before PD, or younger than 18 years, or with non-renal kidney diseases before the CAPD. APD patients and CAPD patients were identified and matched according to their propensity score predicted by age, gender, comorbid conditions, Charlson Comorbidity Index, medication history, and premiums wages in the year of treatment initiation. There were 2,287 APD and 2,267 CAPD patients enrolled to the final analysis. The Kaplan-Meier cure and Cox proportional hazard regression were performed to examine the differences in mortality rate, technique failure rate and incident rate of peritonitis between APD and CAPD. RESULTS: CONCLUSIONS: The APD patients seemed to have higher mortality rate and technique failure rate than CAPD patients, however, APD patients had lower incident rate of peritonitis than CAPD patients in Taiwan.

PUC3 A STUDY TO ASSESS DISEASE PROGRESSION TO ESRD WITHIN A YEAR IN PATIENTS WITH ADVANCED CKD

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OBJECTIVES: Aimed at determining the time period for the progression to ESRD and also to identify risk factors for the progression to ESRD. METHODS: A retrospective cohort study was conducted in a tertiary care teaching hospital. The data was collected from medical record dept. for the last two years (2012 and 2013) in hospital. Demographic details and clinical parameters of ESRD patients with major risk factors for ESRD were collected and the Cox proportional hazard regression was fitted to the data to test if the risk factors have significant effect on the progression to ESRD. RESULTS: A total of 240 patients were included in the study. The mean age of the population was found to be 54±14.2 years. Majority of the population were males (74.83%). Hypertension (67.7%), Diabetes (47.1%) and anemia (43.2%) were the most prominent risk factors present in the study population. More than half of the population (72.5%) took more than a year to progress to ESRD. CONCLUSIONS: The study revealed that males are at a higher risk of ESRD with a history of hypertension and diabetes. The study concluded that more than 50% of the patients took more than a year to progress from CKD to ESRD. The information helps physicians and patients inform decisions regarding preparation for renal replacement therapy in patients with advanced CKD.

PUC4 BE CAUTIOUS OF TRIPLE WHAMMY!!!

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OBJECTIVES: This study was aimed to identify the occurrence of concomitant pre-scribing of NSAIDs, ACE Inhibitors (ACEI) and diuretics known as triple whammy reported in patients at a Malaysian teaching hospital. It also aimed to identify the relationship between the prescriptions of triple whammy with specific age. METHODS: A retrospective, observational study was performed in a general teaching hospital. The patients’ prescriptions (January-March 2012) from the outpatient pharmacy department were prescribed with NSAIDs, ACE Inhibitors (ACEI) and diuretics were reviewed and recorded. The association between the prescriptions with age was investigated. Statistical analysis was done using SPSS with significance difference determined by P value of < 0.05. RESULTS: Four hundred and twenty four patients (56.1% male) were included. Four hundred and twenty two patients were taking one or more of NSAIDs, ACEI and diuretics and only 2 patients were taking all three. Majority of our patients (60.1%) received the combination of ACEI and diuretics. Combination of ACEI and diuretics were mainly (21.7%) prescribed to patients above 65 years old (p=0.362). CONCLUSIONS: The occurrence of triple whammy at a teaching hospital during the period of data collection is low. This is indeed a good predictor of safe pre-scribing of drugs among physicians as concomitant use of these three medications may impair renal function especially in the elderly and dehydrated patients. Majority of the patients that were prescribed with combination of diuretics and ACEI are above 65 years old, therefore proper monitoring of their renal function and the hydration status should be performed to reduce the risk of renal insufficiency in the future.

UNRINE/KIDNEY DISORDERS – Cost Studies

PUC5 A BUDGET IMPACT ANALYSIS (BIA) OF THE USE OF PARICALCITOL FOR THE TREATMENT OF SECONDARY HYPERPARATHYROIDISM (SHPT) IN END STAGE RENAL DISEASE PATIENTS

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OBJECTIVES: Budget impact analysis (BIA) of the use of paricalcitol versus alternative treatment for the management of secondary hyperparathyroidism (SHPT) in end stage renal disease patients. METHODS: A Markov model was used to simulate the evolution of end stage renal disease patient through transplant and death and to estimate associated direct health costs comparing the use of paricalcitol and ritodrine plus low dose vitamin D over a 5-years horizon and using the Italian National Health System perspective. The model was developed using parameters from literature and assumption discussed with clinicians. National tariffs and costs from literature were used to value drug use, dialytic treatment, hospitalizations and transplant. One-way sensitivity analyses for model inputs were conducted. Costs and effects were presented at 0 and 3 years. RESULTS: Considering 13.311 candidate subjects for each treatment strategy, results from the model showed a decrease in direct health care costs from 1.792.921.351 Euros to 1.562.357.209 Euros in favour of paricalcitol over 5 years. Particularly, paricalcitol produced an overall saving in drug costs for more than 51 millions Euros while the other direct health costs related to dialysis, hospitalization and transplant were reduced by approximately 109 millions Euros. CONCLUSIONS: SHPT represents a significant concern in the long-term outcome of ESRD patients mainly associated with dialysis and transplant the use of paricalcitol for the treatment of SHPT in these patients represents a valid alternative not only from a clinical point of view but also from an economic point of view.

PUC6 ANALYSIS OF BUDGET IMPACT OF ANEMIA CORRECTION IN RUSSIAN PATIENTS WITH CHRONIC KIDNEY DISEASE

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OBJECTIVES: To analyze budget impact strategies of anemia correction with different stimulators of erythropoiesis in patients with chronic kidney disease (CKD). METHODS: Pharmacoeconomic analysis included cost modelling for a new strategy for patients with CKD and anemia that includes the use of continuous erythropoietin receptor activator (CERA) compared with traditional darboepoetin alfa (as described in ARCTOS study). The model included two stages: 1. Estimation of costs in 18 week correction period (phase 1 study), and 2. Estimation of costs and effects within 10 weeks (phase 2 study). The study included in two groups of 100 people, the first with CERA and the second with darboepoetin alfa. According to ARCTOS study, fewer patients treated with continuous erythropoietin receptor activator (CERA) required blood transfusion compared with darboepoetin alfa (2.5% and 6.8%, respectively). The drugs in the study were administered under medical supervision in a day hospital. The time horizon of the study was 28 weeks. RESULTS: The phase of a phase 1 was 53 187.21 in CERA group and 104 528.88 RUB in the darboepoetin alfa group. The costs were almost identical in the second phase. The costs in darboepoetin alfa group were 2.7 times higher compared with CERA in respect of blood transfusion and 2 times higher in respect of drug administration. The cost of pharmacotherapy in CERA group was significantly lower than in group of darboepoetin alfa. Total costs in CERA group were 1, 7 times lower than those for darboepoetin alfa. CONCLUSIONS: The study demonstrates that administration of CERA is the most economically effective strategy for the treatment of patients with chronic renal disease in Russia. It is associated with considerably lower costs compared to darboepoetin alfa.

PUC7 BUDGET IMPACT EVALUATION OF TREATMENT WITH A LOW PROTEIN DIET AND KETOANALOGUES OF ESSENTIAL AMINOACIDS FOR PREDIALYSIS PATIENTS IN RUSSIAN FEDERATION

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OBJECTIVES: To evaluate budget impact of low protein diet (LPD) and ketoanalogue of essential aminoacids for predialysis patients in Russian Federation perspective. METHODS: Analytic decision-making model and budget impact analyses (BIA) were performed. Direct costs (ketoanalogues, hemodialysis, peri-sthesia, transfusions, etc.) were considered. The costs were compared with previous literature reported in Russia. The outcomes of BIA were presented at scenarios of 1 year and 5 years. The following prices were used: rates of State medical insurance fund, Sechenov First Moscow State Medical University hospital price lists, NHS medication prices. Exchange rate: 1EURO = 40 RUB. RESULTS: The first year annual costs were 33186 EURO per patient for the patients group on dialysis and 8620 EURO for the group of ketoanalogues. The results of BIA have shown that administration of ketoanalogues and LPD provides cost-saving of 14562 EURO per patient in the first year compared with dialysis group. Total cost-saving per patient in the group of ketoanalogues and LPD over 5 year period was 12895 EURO compared with the dialysis group. CONCLUSIONS: Budget impact assessment has shown, that ketoanalogues and LPD in Russian Federation is a preferable technology and provides cost-saving of 12895 EURO over five years per patient.

PUC8 A MACROECONOMIC MODEL TO INVESTIGATE THE BUDGET IMPACT IN SPAIN OF ONABOTULINOXUMA TO MANAGE URINARY INCONTINENCE IN PATIENTS WITH IDIOPATHIC OVERACTIVE BLADDER

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OBJECTIVES: Treatment options for patients for whom urinary incontinence (UI) of idiopathic overactive bladder (OAB) is inadequately managed by anticholinergic therapy are limited, and can be expensive, invasive and ineffectuous. This can lead to a significant economic burden to hospitals and health care systems. OnabotulinoxumA may provide an effective and minimally-invasive treatment option. The macroeconomic model was developed to investigate incremental savings associated with the use of OnabotulinoxumA – as an adjunct to best-supportive care (BSC) – to manage OAB rather than other treatment options in Spain. METHODS: A prevalence-based, deterministic budget impact model with a five-year time horizon was developed from the perspective of the Spanish health care.