PUK8 IMPACT OF ARTHRITIS AND OTHER COMORBIDITIES ON INCIDENCE OF URINARY INCONTINENCE: A CASE CONTROL STUDY
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OBJECTIVES: Urinary Incontinence (UI) is associated with several chronic health conditions including arthritis. Literature suggests that arthritis may modify the association between chronic conditions and UI. Little is known about this interaction of arthritis with other chronic diseases and their impact on UI. This study examined these associations. METHODS: This was a retrospective case-control study of a 10% random sample of IMS Life Link data from 2001-2011. Subjects were ≥ 18 years of age and continuously enrolled 18 months pre and 12 months post their first index diagnosis. UI cases had at least two outpatient or one inpatient claim at least 7 days apart, or one pharmacy claim for a UI drug. Controls with no diagnosis but matched on age, gender and region. Comorbidities are observed in the 12-month pre-index period after leaving 6 months buffer time immediately before index diagnosis. Conditional logistic regression (CLR) adjusted for health system variables and other co-morbidities was used to investigate the effect of the interaction between arthritis and other comorbidities on UI. RESULTS: There were 24,499 cases, and 73,497 controls with a mean age of 58.29 years and 69.8% females. Forty percent of cases and 24.8% of controls had arthritis in their pre index period. Arthritis alone was significantly associated with UI alone (OR = 1.87, p < 0.0001), multiple Sclerosis (MS) alone (OR = 4.25, p < 0.0001) and cardiovascular diseases (CVD) alone (OR = 1.32, p < 0.0001). However, the interaction of arthritis and MS (OR = 7.48, p < 0.0001), arthritis and CVD (OR = 2.10, p < 0.0001) increased considerably the odds of developing UI. CONCLUSIONS: Compared to arthritis or chronic conditions alone, the combination of arthritis with other chronic conditions significantly increases the risk of having UI.

PUK7 LENGTH OF STAY AND MORTALITY IN HYPERPHOSPHATEMIA PATIENTS ADMINISTERED PHOSPHATE BINDERS COMPARED WITH MATCHED CONTROLS
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OBJECTIVES: Hyperphosphatemia, an electrolyte disorder characterized by elevated levels of phosphate in the blood, is a risk factor for chronic kidney disease (CKD) and associated with increased risk of mortality. In addition to dietary changes phosphate binders (PB) may be administered to hyperphosphatemia patients to reduce phosphate levels. The objective of this study is to evaluate the impact of PB on CKD patients with hyperphosphatemia. METHODS: A retrospective, cross-sectional analysis was conducted on 70,728 inpatient discharges in the MedAudits health claims databases associated with PB administration for 2006-2013. Cohorts of patients with and without PB were matched on age, sex, principal diagnosis, hospital bed size, region, and teaching status using a propensity score and greedy matching algorithm. In-hospital mortality and length of stay (LOS) were compared between cohorts using multivariate logistic and negative binomial regression models, respectively, controlling for Deyo-Charlson comorbidity score, complications, and procedures. RESULTS: Of patients diagnosed with hyperphosphatemia approximately 46% were administered PB during their stay. Matching resulted in 11,432 patients in each cohort with a mean age of 61 and proportionately more males (54%) than females (46%). Patients receiving PB had higher Deyo-Charlson scores (5.70 vs. 5.46, p = 0.0001), higher rates of acute kidney failure (48.0% vs 33.7%, p < 0.0001), and higher rates of acute respiratory failure (45.1% vs. 37.7%, p < 0.0001). Patients without PB had higher rates of acute kidney failure (48.0% vs 33.7%, p < 0.0001) and transplants (6.8% vs 2.0%, p < 0.0001). After adjusting for complications and comorbidities phosphate binders (PB) were associated with a 46% decreased risk of in-hospital mortality and longer LOS compared to patients without a PB. Further studies should assess post-hospitalization outcomes as well as variation among types of PB.

URINARY/KIDNEY DISORDERS – Cost Studies

PUK9 EARLY CANNULATION ARTERIOVENOUS VASCULAR GRAFTS FOR HYEMODIALYSIS: A COST-SAVING ALTERNATIVE TO TUNNELED CENTRAL VENOUS CATHETERS? AN ESTIMATED BUDGET IMPACT ANALYSIS IN A SINGLE- CENTRE
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OBJECTIVES: Tunneled central venous catheters (TCVCs) are frequently used for patients requiring urgent vascular access for haemodialysis (HD), whilst they await definitive access creation, primarily arteriovenous fistula (AVF). TCVCs are associated with various complications notably infections, sepsis and high costs to treat. Early cannulation arteriovenous grafts (eAVGs) are a new alternative providing vascular access for HD within 24 hours post implantation. We estimated the potential health and cost impact of using eAVGs compared to TCVCs for clinically suitable patients while they await a functioning AVF. The analysis was used to understand the potential financial implications of adopting eAVGs and to inform the decision to conduct a Randomized Controlled Trial (RCT) to study the appropriateness of these techniques. METHODS: A budget impact model was used in Excel. The model estimated the cost to the hospital of the two treatment strategies. Costs of procedures, re-interventions and sepsis or amputations were included. Clinical inputs including referral delays for treatment and patient acceptability of eAVGs, were taken from a feasibility observational study conducted at the hospital, internal audits and published lit-