The association hemoglobin levels with health-related quality of life of patients with chronic kidney disease

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OBJECTIVES: Improvement of hemoglobin in non-dialysis chronic kidney disease (CKD) patients was associated with an increase in health-related quality of life (HRQoL), but in dialysis patients it was still a debate. The purpose of this study was to determine the relationship of hemoglobin levels to HRQoL.

METHODS: The research design is cross sectional study, conducted on CKD patients who performed dialysis at two hospitals in Yogyakarta Indonesia. This study examined the relationship between HRQoL and hemoglobin (Hgb) levels in 61 patients with CKD performed hemodialysis. Patients’ hemoglobin levels were categorized in 3 levels, i.e < 9.0, 9.0 to <10, and ≥10. HRQoL was measured using KDQoL SF-36 when patients visited to the hospital for hemodialysis. ANOVA was used to test the relationship between HRQoL score and hemoglobin levels. RESULTS: The relationship of the level of hemoglobin on the HRQoL scores on the domains of the quality of social interaction and sleep (p < 0.05) were significantly different based on the category of hemoglobin level. Scores of cognitive functions improved with increasing Hb levels. With increasing Hb levels, the patients had a better perception of their health status. CONCLUSION: Higher hemoglobin levels are associated with an increase in the HRQoL domain of the KDQoL SF-36 questionnaire. These findings have implications for the care of CKD patients in maintaining hemoglobin levels.

URINARY/KIDNEY DISORDERS – Health Care Use & Policy Studies

PUC2
SEVERITY OF KIDNEY DISEASE IN SYSTEMIC LUPUS ERYTHEMATOSUS
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OBJECTIVES: Systemic lupus erythematosus (SLE) is autoimmune disease and some- times affects kidney function. The objective of this study is to assess the severity of chronic kidney disease in SLE over time. METHODS: In Japan, SLE has been one of designated diseases for the Specified Disease Treatment Research Programme (transferred to Intractable Disease Health Care in 2015) that provides co-payment reduction for the programme, a doctor’s statement should be submitted. Registration data for the programme with indication for SLE were extracted from fiscal years 2004 to 2008. Extracted data were analysed and compared in terms of patients’ age, gender, CKD stage, treatment patterns (n=1436 records were extracted). Total numbers of patients were 56,517 and the male/female ratio was 1:8.7. 1076 patients newly applied for the programme, which implies new-onset SLE. 6818 records (5%) showed symptom of kidney disease. 6056 cases fell in GFR category G1 (88%), 339 cases fell in G2 (5%), 133 cases are fell in G3a (2%), 104 cases fell in G3b (2%), 82 cases fell in G4 (1%) and 104 cases fell in G5 (2%). CONCLUSIONS: Prevalence of kidney disease among patients with SLE in Japan is 5%. Considering that GFR category G1 makes up 95% of the patients with kidney disease, prevention of aggravation is important.

PUC24
POTENTIAL MEDICATION TRIGGERS OF DETRIMENTAL RENAL FUNCTION AMONG PATIENTS WITH TYPE 2 DIABETES: USING REAL WORLD DATA
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OBJECTIVES: Identification of medication risk factors for a deteriorated renal function is important to prevent chronic renal damage. The objective of this study was to identify and confirm drug exposure as potential triggers for a deteriorated renal function among type 2 diabetes mellitus (T2DM) patients using real world data (RWD).

METHODS: A nested case-control study within a T2DM cohort was conducted using the PHARMOR Database Network. Between 1999 and 2014 cases with a deteriorated renal function were matched on sex, birth year and geographic region to controls without a decline in renal function. Date of renal decline among cases was set as index date; controls were assigned the index date of their matched cases. Exposure assessment was performed using data from the Medical Information System of the European Medicines Agency in the 6 months before index date was compared between cases and controls. RESULTS: 3,179 cases were matched to 6,106 controls (50% male, mean±SD age 75±9). The following known medication triggers, based on literature, were associated with deteriorated renal function: anti-inflammatory drugs (OR 1.41 (95%CI 1.28-1.55)) contrast agents (OR 2.37 (95%CI 1.81-3.10)), antibiotics (OR 2.82 (95%CI 2.58-3.09)), antihypertensives (OR 2.66 (95%CI 2.42-2.93)), PPIs (OR 2.45 (95%CI 2.24-2.67)) and statins (OR 1.35 (95%CI 1.23-1.48)). Among drugs requiring additional monitoring of safety domperidone was associated with deterioration in renal function (OR 5.09 (95%CI 3.74-9.91)). CONCLUSIONS: Real world data is an important source for identification and confirmation of medication risk factors for deterioration in renal function.

PUC25
REAL WORLD TREATMENT PATTERNS IN THE NEUROGENIC BLADDER POPULATION: A SYSTEMATIC LITERATURE REVIEW
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OBJECTIVES: To describe the treatment patterns and management strategies of neurogenic bladder (NGB) in real-world settings. METHODS: A systematic review (SR) was conducted using MEDLINE and EMBASE (1996-2017). Key terms included a total of seven treatment patterns and independent search. The inclusion criteria for studies were: 1) published in English; 2) conducted in human subjects; 4) reporting the treatment patterns/use in NGB (any neurogenic condition listed in the EAU guidelines); 5) conducted in a real world setting. Articles were reviewed by the research team, and those with a notable amount of patients switched treatments. The most popular oral pharmacotherapies were alpha-blockers and antimuscarinics used for neurogenic detrusor overactivity (NDO) and detrusor sphincter dysynergia (DSD). One study which focused on spina bifida reported that the majority of patients underwent surgery. CONCLUSIONS: With passing time, clinicians have moved away from techniques associated with higher rates of complications and mortality. This has meant that in recent years, the survival chances of patients with NGB have increased. This suggests that current treatment patterns will be different from what was uncovered in this review. Epidemiological studies using electronic healthcare records (EHRs) are necessary to advance our understanding in how NGB patients are managed in current practice, and how well patterns relate to practice guidelines.

PUC26
BURDEN OF ILLNESS ASSOCIATED WITH ANAEMIA IN CHRONIC KIDNEY DISEASE IN JAPAN: A LITERATURE REVIEW
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OBJECTIVES: Identify the disease burden and treatment patterns associated with anaemia in Japanese patients with chronic kidney disease (CKD).

METHODS: According to PICO criteria, Medline®, Embase®, and Ichiku Chuo Zasshi (ICHIUS) databases were searched for observational studies, database analyses, and economic evaluations published in Japanese, from 2004 to 2014. Patent populations included Japanese CKD patients with anaemia, on or not on dialysis. Outcomes were epidemiological, economic, and humanistic burden, and treatment pat- terns. RESULTS: Of 1030 references screened, 48 (Japanese, n=27, English, n=21) reported epidemiological (n=23), economic (n=30), and humanistic (n=1) burden; or treatment patterns (n=26). Anaemia prevalence, when defined as haemoglobin (Hb) <10 or <11 g/dl, varied widely (13.8–93%, n=5) among haemodialysis (HD) patients; four studies reported mortality rates (7.2–50%) in HD patients and two evaluated cardiovascular events. While 33 economic studies reported medication dosing, nine reported cost data; one reported a monthly cost of JPY 29,313–37,285 for anaemia management in peritoneal dialysis and HD patients, respectively, and none evalu- ated the direct impact of anaemia. One humanistic study reported quality of life using the Kidney Disease Quality of Life Instrument, and indicated that patients with Hb <8 g/dl scored 1.6 points lower on the physical and mental component summaries than patients with Hb 11–12 g/dl. Fourteen of the 26 studies reporting treatment patterns included data on responsiveness to erythropoiesis stimulating agents (ESA); darbepoetin alfa, epoetin alfa and beta, and epoetin beta pegol), ten reported median time, duration, time to dialysis initiation, four reported sup- portive treatments, and one reported ferric citrate hydrate use. CONCLUSIONS: This literature review identified an abundance of data on medication dosing and treatment patterns, particularly regarding ESAs. However, the lack of humanistic and cost data reveals a need for further investigation of these outcomes among Japanese patients with anaemia and CKD.

RESEARCH POSTER PRESENTATIONS – SESSION II

HEALTH CARE TREATMENT STUDIES

PHS1
ASSESSMENT OF KNOWLEDGE, ATTITUDE AND COMMON BARRIERS TOWARDS REPORTING ADVERSE DRUG REACTIONS BY PUBLIC IN MALAYSIA
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OBJECTIVES: To determine the knowledge, attitude and common barriers of participants towards ADR and to determine the common barriers towards reporting an ADR in Malaysia.

METHODS: A descriptive, cross-sectional study was conducted for a period of 3 months in the state of Terengganu, Malaysia. The data was collected by a self-administered questionnaire with a total of 3 sections. RESULTS: Among the 400 respondents, 144 (36%) were male and 256 (64%) were female. The majority of the respondents were Chinese (n=227, 57%). About 27% of respondents (n=108) paid attention when a friend or relative reported an ADR, which is an ADR. A significant number of the participants (n=333, 83%) were unaware of the ADR reporting center in Malaysia and about (n=344, 86%) stated that they were not aware of the ADR reporting procedure. Participants considered that inadequate knowledge/edge regarding drugs (n=395, 87%), their unawareness of reporting