P06 Clustering of Cardiovascular Risk Factors and Blood Pressure Control among Elderly Hypertensive Patients in a Primary Care Setting. (YC Chia,1,2, SM Ching1)

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Introduction: Hypertension is a worldwide cardio-metabolic disease with high morbidity and mortality. This study aims to examine the clustering of cardiovascular risk factors and blood pressure (BP) control status among elderly hypertensive patients in a primary care clinic. Methods: This is part of a retrospective cohort of patients registered at the Department of Primary Care Medicine Clinic, University Malaya, Malaysia. Medical records of hypertensive patients ≥ 65 years of age, in 2007 were randomly selected. Risk factors for cardiovascular disease consist of obesity, diabetes, chronic kidney disease, dyslipidemia, age, family history of cardiovascular disease and smoking. Target control BP was defined as < 140/90 mmHg for non-diabetes and < 130/80 mmHg for diabetes.

Results: Of the 1547 respondents, 716 were hypertensive. 1547 respondents, 716 were hypertensive. Mean age was 73.9±6 years old with 62% female. 6.7% were smokers and 9.9% had a family history of cardiovascular disease. Majority (87.6%) had dyslipidemia, 56% had diabetes, 46.6% had chronic kidney disease and 18% were obese. A total of 76.4% of the patients had 3 or more cardiovascular risk factors. 46% of them achieved blood pressure control. The predictors for the good BP control are those older (OR 1.03, CI 1.00-1.06), with no diabetes (OR 1.03, CI 1.03-2.012) and having cardiovascular risk factors (OR 0.71, CI 0.096-0.22).

Conclusion: More than three quarters of elderly hypertensive patients had ≥ 3 cardiovascular risk factors and their BP control were suboptimal. Those older male patients with > 3 cardiovascular risk factors appeared to have better BP control.

P07 Profiling protein expression level of frail geriatric in-patients and identification of potential biomarkers. (Puvanesarajah R1,2, AV Chintu1, Abdul-Rahman PS3, SB Kamaruzzaman4, MP Tan3, PWH Poon4, Hashim OH5)

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Introduction: Frailty is an age-related syndrome characterized by loss of homeostasis in organ systems. It is an important concept in geriatric medicine as it may help in identifying individuals in need of intervention to maintain independence. Many tools have been developed to assess frailty such as Fried’s criteria and Rockwood’s accumulation of deficits. However, there is currently no clear consensus as to what determines frailty. The identification of biomarkers that indicate homeostatic decline may therefore be important in the determination of frailty.

Objective: The primary objective of this study is to compare the protein expression profile of healthy, pre-frail and frail individual and to identify potential biomarkers of frailty. A secondary objective is the validation of the British Frailty Index (BF1) in the local community.

Method: Patients admitted to the University Malaya Medical Centre Geriatric ward, will be prospectively recruited. Serum obtained will be analyzed using 2-Dimensional Electrophoresis (2-DE) followed by gel staining, mass-spectrometry for protein spot identification and validation of identified serum protein of interest using Enzyme Linked Immunosorbent Assay (ELISA).

Results (expected outcome): 68 numbers of patients have been recruited. Proteomic analysis is underway. It is anticipated that pathophysiological changes of frailty syndrome will be expressed through series of proteins of interest which can be identified as potential biomarkers of frailty.

Conclusion: Frailty is associated with significant morbidity. The impact of frailty can be reduced however, with appropriate and timely intervention. As such, the identification of biomarkers that can improve the diagnostic accuracy of frailty is essential.

P08 Pharmacist’s involvement in Home Medication Review (Hadjiah T, Rosmali A, Hannah AH)

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Introduction: Pharmacist’s involvement is known to be a part of the multidisciplinary team approach in the care of the elderly patients. Among the crucial roles of a pharmacist in this aspect is the review of medications during the home visit to ensure the Quality Use of the Medications supplied. The main objectives are to improve health outcomes of the patient by ensuring appropriate and safe medications supply, as well as judicious and efficacious medication usage to improve their quality of life. There is a tendency for elderly patients to be prescribed with multiple medications that could lead to an increase in the risk of side effects due to drug interactions and the deterioration of organ function.

Method: From 2012 until June 2013, sixty one patients’ homes have been visited by the Hospital Kuala Lumpur Geriatric Home Visit team. Several problems were identified during the home visits. Among them were inappropriate medication storage, compliance issues towards medications, and the emergence of tolerable side effects and excessive or inadequate medication supply.

Results: Justification imported from 26 visits from January until June 2013 has led to several interventions such as readmission of 1 patient, rescheduling for earlier appointments for 5 patients and 1 patient was discharged from the geriatric team’s monitoring due to functional recovery and other resolved issues. It was also noted that during the home visits conducted, there are 6 patients identified to be having more than 1 follow up from different disciplines, where it gave rise to the incidence of 2 cases of polypharmacy, 6 cases of stockpiling of medications and 3 cases of the accumulation of expired medications. In addition, compliance and adherence assessments performed during the home visit revealed a result of 7 patients with low adherence with 3 of them relating to the side effects of the medications.

Conclusion: Based on the findings, the pharmacists are responsible for the provision of drug-related information and advocating the caregivers regarding the medication administration and handling of therapeutic devices. Involvement of the pharmacists in the implementation of HOME VISIT services will ensure better therapeutic outcomes in medication management.