

Abstracts of Dissertations

December 2015 Exit Assessment Exercise

STEVENS-JOHNSON SYNDROME AND TOXIC EPIDERMAL NECROLYSIS: A RETROSPECTIVE ANALYSIS OF CASES IN A REGIONAL TERTIARY HOSPITAL

Dr Yeung Ming Fong, Department of Medicine & Geriatrics, Tuen Mun Hospital (December 2015 Advanced Internal Medicine Exit Assessment Exercise)

Background Stevens-Johnson syndrome (SJS) is a severe drug-induced reaction carrying significant mortality especially when there is toxic epidermal necrolysis (TEN). Early recognition, identification and withdrawal of offending drugs and good supportive treatment are required for better outcome.

Objectives To investigate the demographic data, clinical, biochemical and histological characteristics, suspected causative agent(s) and pattern, treatment strategies, systemic complications during the clinical course and outcome of cases of SJS and TEN during the period from 2000 to 2014 in a regional hospital, and to analyze possible predictive factors for the mortality on SJS and TEN. An attempt was made to compare different treatment modalities and with review of evidences in the literature.

Method A retrospective, single-centered study. Data was collected from in-patient records in the period from January 2000 to December 2014. Cases with principal and secondary diagnosis of Stevens-Johnson syndrome or toxic epidermal necrolysis were retrieved from Clinical Data Analysis and Reporting System. Those adult cases with dermatologist diagnosis of SJS or TEN or with histopathology of skin biopsy showing SJS or TEN would be included. Several factors would be analyzed: patient demographics, co-morbidities, causative drug(s) and pattern, systemic complications, treatment modalities given and outcome measures (morbidity and mortality). Relevant literatures would be reviewed for discussion.

Results There were 81 patients diagnosed with SJS, SJS/TEN overlap and TEN in the year 2000 to 2014 in Tuen Mun Hospital with overall mortality rate 19.8%. Mean age of onset was 51.2 years (range 18-90, SD 21.0) with male to female ratio of 1:1.3. Pyrexia was common on presentation (76.5%) while oral mucositis was the commonest mucosal involvement (96.3%). Usual biochemical abnormalities included raised serum transaminases (51.9%) and renal impairment (37.0%). Allopurinol was the commonest causative drugs followed by aromatic anticonvulsants and non-steroidal anti-inflammatory drugs. Treatment included early discontinuation of offending drugs, monitoring of complications and early identification of sepsis.

No survival benefit was observed in patients treated with systemic corticosteroid. The actual mortality observed was higher than the predicted mortality calculated by SCORTEN in our IVIG treatment group. High dose IVIG was associated with better survival. Age at presentation (odds ratio [OR] 1.1; $p=0.018$), total body surface area of detachable and detached epidermis of over 10% (OR 15.5; $p=0.037$) and presence of septicaemic shock (OR 41.8; $p=0.015$) were independent predictive factors for outcomes.

More studies with clear well-defined protocols are required to enable us to make more definitive and evidence-based statement on management of SJS and TEN. Randomized controlled trials are required in the future to further evaluate the current scoring system and management strategies.

Conclusion Stevens-Johnson syndrome and toxic epidermal necrolysis are life threatening dermatological emergencies carrying significant morbidity and mortality. Early recognition of disease and prompt discontinuation of causative medications are of paramount importance in the management. Close monitoring of the progress, complications and early identification of sepsis are required to minimize mortality. High dose intravenous immunoglobulin was

associated with better survival. More researches with well-defined protocols are required to further evaluate the current scoring system and management strategies of SJS and TEN.

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ANGIOGRAPHY-GUIDED MULTIVESSEL PCI VS ISCHAEMIA-GUIDED PCI VS MEDICAL THERAPY IN THE MANAGEMENT OF SIGNIFICANT DISEASE IN NON-INFARCT RELATED ARTERIES IN STEMI PATIENTS WITH MULTIVESSEL CORONARY DISEASE

Dr Lee Kar Fai Victor, Department of Medicine & Geriatrics, Princess Margaret Hospital (December 2015 Cardiology Exit Assessment Exercise)

Background Up to 46% of STEMI patients have multivessel disease (MVD). After primary PCI, routinely stenting significant disease in non-infarct-related coronary arteries is controversial. Whether ischaemia testing should be done prior to PCI is unclear.

Aim To perform a retrospective analysis on STEMI patients with MVD. After primary PCI, the remaining disease was treated by angio-guided multivessel PCI, ischaemia-guided PCI or medical therapy. The aim is to compare these treatment strategies in terms of all cause mortality and major cardiovascular events.

Methods All patients treated with primary PCI for STEMI between 1/1/2005 to 31/12/2012 at London Chest Hospital were reviewed. Inclusion criteria: patients with at least 70% stenosis in one or more of the other non-infarct related arteries. After opening up the occluded vessel, patients received one of three treatments: 1) Angio-guided multivessel PCI 2) Ischaemia-guided PCI 3) Medical therapy. Primary endpoints are all-cause mortality and major cardiovascular events (MACE) including death, acute coronary syndrome, revascularization or stent thrombosis. Event free survivals were compared.

Results 447 STEMI patients had >70% stenosis in at least one other non-infarct related arteries. For all-cause mortality, all three strategies do not differ. For MACE, ischaemia-guided PCI yields the lowest MACE rates. Medical therapy gives the highest MACE rate, driven mainly by death and myocardial infarction. Angio-guided MV-PCI/Ischaemia guided: HR 2.23 (95% 1.11-4.48, p = 0.02); Medical Therapy/Ischaemia guided: HR 1.72 (95% 1.08-2.74, p = 0.02); Angio-guided MV-PCI/Medical Therapy: HR 0.63 (95% 0.38-1.01, p = 0.06).

Conclusion Complete revascularization in STEMI-MVD patients gives lower MACE rates than medical therapy. Of the complete revascularization strategies, ischaemia-guided PCI gives lower MACE rates than angio-guided MV-PCI. There are no mortality differences between the three strategies.

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SCREENING OF ASYMPTOMATIC CHLAMYDIA TRACHOMATIS AND NEISSERIA GONORRHEA INFECTIONS AMONG MEN WHO HAVE SEX WITH MEN IN HONG KONG (A CROSS-SECTIONAL STUDY IN SOCIAL HYGIENE CLINICS)

Dr Chau Chuen Tak, Social Hygiene Service, Department of Health (December 2015 Dermatology & Venerology Exit Assessment Exercise)

Background Both *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) infections have been associated with increased risk of transmission of human immunodeficiency virus (HIV). In order to establish guideline for screening of asymptomatic CT and NG infections among men who have sex with men (MSM) in public Sexually Transmitted Infection (STI) clinics in Hong Kong, a study to determine the prevalence and predictors of these infections among MSM in Hong Kong is warranted.

Objectives To (1) determine the prevalence of asymptomatic CT and NG infections of different anatomical sites among MSM attending the Social Hygiene Clinics in Hong Kong, (2) evaluate the predictors of these infections, (3) compare various screening strategies regarding detection rate and cost.

Methods This was a cross sectional study conducted from Oct 2014 to March 2015. MSM attended two large Social Hygiene Clinics in Hong Kong who got no symptom suggestive of CT or NG infections were recruited. Multiple swabs were collected from the urethra, rectum and pharynx of enrolled MSM to screen for CT and NG infections. Data regarding demographics, past history of STIs and sexual practices were collected by questionnaires. The prevalence and predictors of asymptomatic CT and NG infections were evaluated.

Results There were 158 MSM enrolled and the median age is 27 years. The prevalence of total asymptomatic CT or NG infections from any of three anatomical sites is 19.6%. Independent risk factors of these infections among MSM are young age, lower education, history of soft drug use, and unprotected anal sex within one month. The prevalence of CT is 4.4% in urethra, 11.4% in rectum and 2.5% in pharynx. The prevalence of NG is 0% in urethra, 6.3% in rectum and 3.2% in pharynx. Urethral-only screening can only detect 19.4% of total infections, whereas 74.2% of infections can be picked up by screening the rectum alone and 90.3% by screening both the rectum and pharynx.

Conclusions A substantial proportion of asymptomatic CT or NG infections can be picked up by routine screening among MSM in Hong Kong. Extra-genital screening especially from the rectum is important in picking up these infections.

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EFFICACY OF VIBRATION-ASSISTED ANAESTHESIA IN THE INTRALESIONAL STEROID INJECTION FOR KELOID

Dr Yuen Ka Lai, Social Hygiene Service, Department of Health (December 2015 Dermatology & Venerology Exit Assessment Exercise)

Background Intralesional steroid injection remains the most common treatment of keloids. A major disadvantage is the pain associated with the injection. It can lead to patient noncompliance in the follow-up. Vibration assisted anaesthesia by a simple vibration device has been shown to reduce pain during injectable and dermatological procedures in previous studies, but such study in intralesional steroid injection for keloids is still lacking.

Objective To study the efficacy of vibration-assisted anaesthesia by non invasive commercially available massager for pain relief in the intralesional steroid injection for keloid.

Design Prospective cross-sectional self-controlled interventional study

Methods Eligible patients were given same dosage of intralesional steroid solution at two different areas of a single keloid with and without vibration device. The sequence of intervention was randomized. The area and thickness of injection sites were measured. The same physician administered all the injections. Patients' subjective pain scores and their preference for vibration technique were recorded.

Results Sixty-six patients completed the study. The median pain score on the control side (without vibration) was 6.75 versus 4 in the intervention side (with vibration). Overall, there was statistically significant pain score reduction with the use of vibration assisted anaesthesia. The baseline pain score on the control side was significant higher in female than in male (7 vs 5, $p < 0.03$, female vs male). There was no correlation between pain scores and the age of patients, duration, sizes of keloids and the number of previous intralesional steroid injections. About 82% patients in this study opted for vibration assisted anaesthesia in future intralesional steroid injection and 76% patients agreed that vibration made intralesional steroid injection more acceptable.

Conclusion This study demonstrated that vibration assisted anaesthesia was a safe and effective means of achieving clinically significant pain reduction for patients receiving intralesional steroid injection for keloids.

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ESOMEPRAZOLE OR FAMOTIDINE IN THE MANAGEMENT OF ASPIRIN RELATED NON-ULCER DYSPEPSIA - A DOUBLE BLIND RANDOMIZED CONTROL STUDY

Dr Yu Wen Zhen, Integrated Medical Service, Ruttonjee Hospital (November 2015 Gastroenterology & Hepatology Exit Assessment Exercise)

Background Low dose aspirin is widely used nowadays as an anti-platelet agent for patients with cardiovascular disease, but its use is associated with significant gastrointestinal side effects. The management of aspirin related peptic ulcers is well defined in literature. However, the best management for aspirin related non-ulcer dyspepsia is controversial, and yet causing significant impairment in quality of life of these patients.

Objective To compare the efficacy of esomeprazole and famotidine in treatment of aspirin related non-ulcer dyspepsia.

Method In this double-blind randomized controlled study, 47 patients were randomized to receive esomeprazole 20 mg daily or famotidine 40 mg daily. Primary endpoint in this study was satisfactory symptoms control defined by a Hong Kong Dyspepsia Index score less than 16 and secondary endpoint was mild or no symptoms by Global Dyspepsia Symptoms Score.

Results 47 patients (esomeprazole 25, famotidine 22) were recruited in this study. Primary endpoint was achieved in 23 patients (92.0%) in esomeprazole group and 10 patients (45.5 %) in famotidine group. (p=0.001). Secondary endpoint was reached in 24 patients (96%) and 6 patients (26.1%) in esomeprazole and famotidine groups respectively. (p=0.003)

Conclusions Esomeprazole is significantly superior than famotidine in treatment of aspirin related non-ulcer dyspepsia.

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INFLUENCE OF MRI FINDINGS ON STROKE REHABILITATION OUTCOME

Dr Kwan Shiu Kwong Joseph, Department of Medicine, Queen Mary Hospital (November 2015 Geriatric Medicine Exit Assessment Exercise)

Background Stroke rehabilitation aims to help patients regain functional independence from the physical and cognitive sequelae of the cerebrovascular insult, improving their participation in the society and quality of life. The influence of cerebral structural abnormality on rehabilitation outcome after stroke is unclear. This study aims to deepen the understanding of the role of MRI in predicting stroke rehabilitation outcome, in particular examining for white matter hyperintensities, cerebral microbleeds, and hippocampal volume.

Methods For this study, 2882 consecutive patients who were admitted to the stroke rehabilitation unit at the Tung Wah Hospital (TWH) between 1 March 2008 and 23 May 2014 were screened using the TWH Stroke Database. Patients were included if they: a) had a confirmed diagnosis of stroke; b) managed as an inpatient for stroke rehabilitation; and c) had an MRI brain performed by the HKU Diagnostic Imaging Unit for that particular stroke episode. MRI were examined individually for the severity of white matter hyperintensities (WMH, Fazekas Score), cerebral microbleeds (CMB, Microbleed Anatomical Rating Scale), and hippocampal volume (HV, Scheltens Score). For those who were admitted between March 2008 and May 2012, clinical outcomes during the subsequent 2-years were also extracted from the CMS. Relationships between baseline characteristics, MRI findings, and

stroke rehabilitation outcomes were examined using multiple logistic and linear regression analyses, and multivariate analysis, adjusting for case mix.

Results This study included 377 consecutive stroke rehabilitation patients with a mean age of 70 ± 12 years. 94% were ischaemic strokes, and the overall stroke severity was mild to moderate according to the baseline functional scores. 97% of the patients had WMH, 52% had CMB, and up to 33% had HV loss. Multiple regression analyses demonstrated that stroke subtypes and functional status on admission were consistent independent predictors of improvement in stroke rehabilitation outcomes, whereas MRI parameters had no additional predictive value. Of the 208 of these 377 patients who also had data for their 2-year clinical outcomes, 11% had died or experienced vascular events at 2 years. Only BI on admission was an independent predictor of this primary outcome, whereas MRI parameters had no additional predictive value. Age and WMH were independent predictors for the development of poststroke dementia after adjusting for recurrent stroke and TIA.

Conclusion Amongst Chinese stroke patients with mild to moderate stroke severity, MRI parameters of cerebral aging and vascular damage are highly prevalent. Stroke subtypes and functional status on admission, but not MRI parameters, independently predict improvement in stroke rehabilitation outcomes in hospital. Death or vascular events occur in one-in-nine patients in the subsequent two years; physical disability on admission, but not MRI parameters, is an independently predictor for this outcome. Both white matter hyperintensities and hippocampal volume independently predict the development of new post-stroke dementia. The limitations and lack of generalisability of this exploratory study are recognised, but it serves to pave the way for future larger and more robust prospective studies of neuroimaging in stroke rehabilitation.

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STUDY ON DIABETIC PATIENTS IN THE RESIDENTIAL CARE HOME FOR THE ELDERLY (RCHE) IN NEW TERRITORIES WEST CLUSTER

Dr Lau Chi Cheung Michael, Department of Medicine & Geriatrics, Tuen Mun Hospital (November 2015 Geriatric Medicine Exit Assessment Exercise)

Objective To study the diabetic patients in the Residential Care Home for elderly (RCHE), their characteristics, comorbid conditions, diabetic control, diabetic medications, mortality rate, hypoglycemia and hospitalization. The outcome for patients with different degree of diabetic control also studied.

Methods This is a retrospective cohort study conducted in the Community Geriatrics Assessment Team (CGAT) in the New Territories West Cluster (NTWC) of Hong Kong. Total 105 patients with type 2 Diabetes were enrolled. Baselines characteristics including baseline HbA1c level, demographic data, and the outcome e.g. mortalities, hospitalization and hypoglycemia were studied. Logistics regression model was used to evaluate the mortality outcomes between the three diabetic control groups (tight control: hba1c < 7%; usual control: Hba1c between 7 – 8.5%; loose control: Hba1c > 8.5%) and their associated risk factors.

Results The Cohort (age 78 – 100 years, mean 81.68 ± 7.34 years) had a mean baseline hba1c of $7.56 \pm 1.72\%$ (range 4.5 to 12.4%). Outcomes showed that the first year mortality was 19.1% and the overall 2-years mortality at the end of study was 41%. The first year mortality rates were different among the three groups, with the highest in the tight control group(26.2%) followed by usual control group (18.4%) and the lowest control group (8.0%). While the mortality at the end of the study between the three groups was similar, 31% in the tight control group, 34.2% in the usual control group and 28% in the loose control group.

Conclusions Most of the diabetic elderly in RCHE in our clusters are frail with multiple comorbidities. Relationships between tight control group (hba1c < 7%) with highest mortality in the first 12-month of the study was observed.

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RISK FACTORS FOR PROLONGED DYSPHAGIA FOLLOWING ACUTE STROKE

Dr Lau Wai San Angela, Department of Medicine & Geriatrics, Princess Margaret Hospital (November 2015 Geriatric Medicine Exit Assessment Exercise)

Background Dysphagia is a serious complication of stroke and is closely linked with aspiration and pneumonia. Factors influencing its recovery are incompletely understood. The goal of this study is to determine the prevalence of post-stroke dysphagia, identify possible predictive factors and prognostic variables affecting swallowing recovery and to investigate its relationship with pneumonia and mortality 6 months after stroke.

Methods We retrospectively reviewed 190 patients admitted to rehabilitation ward with acute stroke. Clinical findings, investigation results and diet composition were collected. Subjects were divided into 3 groups for analysis: non-dysphagia; transient dysphagia (diet normalized upon discharge) or prolonged dysphagia (required modified diet upon discharge).

Conclusion Significant associations for prolonged dysphagia were seen with lower body weight, increased stroke severity (measured with GCS, BI, MRMI, MFAC, NIHSS, facial weakness, dysarthria, hemispatial neglect), MCA infarct and cardioembolic infarct. Patients with prolonged dysphagia is predicted to have a longer hospital stay, higher incidence of pneumonia and mortality, with a higher proportion moved to aged home upon discharge.

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OUTCOMES IN ELDERLY PATIENTS WITH END-STAGE RENAL DISEASE: COMPARISON OF RENAL REPLACEMENT THERAPY AND CONSERVATIVE MANAGEMENT

Dr Kwok Wing Hang Dorothy, Department of Medicine & Geriatrics, Caritas Medical Centre (December 2015 Nephrology Exit Assessment Exercise)

Background With global socioeconomic development and improvement in the general health care system, life expectancy increases resulting in an increasing incidence of end-stage renal disease (ESRD) in the elderly population.

Objectives We compared the survival rate in elderly patients aged 65 years or above with stage 5 chronic kidney disease (CKD), managed with either renal replacement therapy (RRT) or conservative treatment. We also tried to identify factors associated with survival in the RRT group and the conservative treatment group.

Methods This was a single-center retrospective study of patients aged 65 years or above with stage 5 CKD, who were referred to the nephrology team for renal Advance Care Planning (ACP) to assist decision-making for renal replacement therapy or conservative treatment from 2005 to 2013. They were followed up till death or till 31stDecember 2014. Baseline characteristics (demographics, clinical data, functional status, socioeconomic factors and laboratory parameters) and mortality data between the two groups were compared.

Results Total 558 patients were recruited during the study period in which 126 (22.6%) patients opted for renal replacement therapy and 432 (77.4%) patients opted for conservative treatment. The RRT group had a longer median survival of 44.6 months compared with 10.0 months in the conservative treatment group. The survival advantage of the RRT group was lost in patients older than 85 years of age, in those with high comorbidity (mCCI \geq 11) or dependent mobility patients. Age, comorbidity and mobility were predictors of mortality in the RRT group. For the conservative group, age, mobility and gender were predictors of mortality.

Conclusion Elderly patients with end-stage renal disease can be benefited by renal replacement therapy. However, the survival advantage of RRT was lost in very advanced age patients older than 85 years of age, or with high comorbidity or functionally dependent patients.

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AUTOIMMUNE ENCEPHALITIS IN HONG KONG: A RETROSPECTIVE STUDY OF CLINICAL CHARACTERISTICS AND OUTCOMES

Dr Hui Ting Hin Adrian, Department of Medicine & Geriatrics, United Christian Hospital (November 2015 Neurology Exit Assessment Exercise)

Background Since the discovery of the first onconeuronal antibody, anti-Hu, autoimmune encephalitis has been intensely studied over the past decades. Many antibodies targeting either intracellular peptides or cell membrane antigens have aroused researchers' interests to delineate the pathophysiological mechanism, clinical manifestations and subsequent outcomes of patients suffering from this disorder.

Objective The aim of the study is to compare the clinical manifestations and outcomes of antibody-positive adult patients in local population, and to identify specific features for early diagnosis in each antibody discussed.

Methods Collaborating with 10 government-funded hospitals in Hong Kong, patients, older than 18 years at time of onset and harboring antibodies of one or more of the following antibodies were recruited: N-methyl-D-aspartate (NMDA), voltage-gated potassium channel (VGKC), alpha-amino-3-hydroxy-5-methyl-4-isoxazolepropionic (AMPA), gamma-aminobutyric acid (GABA), metabotropic glutamate receptor 5 (mGluR5), and glutamic acid decarboxylase (GAD). The study period was between January 2008 and September 2015; demographic, clinical features, and treatment were collected and analyzed for variables to predict treatment outcome.

Results Thirty patients were recruited in this cohort with the median age of symptom onset at 40 years. Twenty of which had NMDA antibodies, 8 VGKC, 1 GABA(B), and 1 mGluR5. The number of cases was steadily accumulating over the years, with an average of 5 new cases discovered per year since 2011. Four died within 7 months of symptom onset. The clinical manifestations and outcomes were similar between our cohort and the current literature. Subjects with NMDA encephalitis presented with seizures (25%), psychiatric symptoms (25%) with prodromal symptoms (30%), and the characteristic orofacial or brachial dyskinesia was also frequently seen in our cohort (35%). However, other specific features such as movement disorders (apart from orofacial/brachial dyskinesia), hypoventilation or dysautonomia were less observed. Subjects with VGKC encephalitis presented with amnesia (63%) and seizure (25%), and the majority (88%) showed hyponatremia compatible with SIADH (syndrome of inappropriate antidiuretic hormone) at onset. One case each was identified for GABA(B) and mGluR5; and they presented with refractory seizure with cognitive impairment, and acute psychosis with fever, respectively. Our result was also able to show admission to intensive care unit (ICU) could predict poor outcome.

Conclusion Recognizing the specific features of each antibody would allow early and aggressive treatment thereby improving the outcome of patients with autoimmune encephalitis.

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A PROSPECTIVE STUDY ON THE RISKS OF FALL IN CHINESE PARKINSON'S DISEASE PATIENTS IN HONG KONG

Dr Lam Yau On, Department of Medicine & Geriatrics, United Christian Hospital (November 2015 Neurology Exit Assessment Exercise)

Background Parkinson's disease (PD) is the one of the commonest neurodegenerative disease worldwide and the prevalence is growing. The hallmarks of Parkinson's disease including tremor, rigidity, bradykinesia and postural instability result in motor disability in PD patients and predispose them to fall. Falls in Parkinson's Disease are of particular

importance as they result in direct injury to patients and secondary consequences with substantial socioeconomic implication.

Objective The objective of this study is to identify the risk factors for falls in Chinese Parkinson's Disease patients which could be potential treatment target in altering disease outcome.

Method This was an observational cohort which included a group of idiopathic Parkinson's disease patient regularly followed up in the movement disorder clinic in a regional hospital prospectively for 6 months to observe for the occurrence of fall and associated risk factors. Patients were recruited over predefined period (Dec 2014 – March 2015) from one single centre. Apart from collection of baseline demographic data, four additional tests were performed including Mini Mental State Exam, Montreal Cognitive Assessment, Tinetti Mobility Test and Multiple Task Test. Retrospective fall history and prospective fall occurrence were recorded both for 6 months.

Result A total of 84 patients completed baseline assessment and provided prospective fall data. Their mean age was 67.8, mean duration of disease 7.9 years. The total number of falls occurred was 47. Twenty nine patients (34.5%) developed at least one fall and were regarded as fallers. Fallers had longer disease duration ($p=0.037$), lower level of dependence in activity of daily living ($p=0.002$), higher number of falls before recruitment (1.7 ± 2.2 , $p < 0.001$). Fallers had more severe PD with higher total Unified Parkinson's disease rating scale (33.0 ± 18.8 , $p=0.007$), performed worse in both Tinetti Mobility test (Total score in fallers 19.8 ± 8.6 , $p<0.001$) and Multiple Task Test (Score in fallers 3.6 ± 2.1 , $p<0.001$)

Conclusion Falls is common in Chinese Parkinson's Disease patients. Our study identified risk factors of fall including previous history of fall, more advanced stage of disease, motor disability resulting in gait and balance disturbance and executive dysfunction with impairment on multitasking to be of statistical significance.

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THE PALLIATIVE CARE NEEDS OF PATIENTS WITH MALIGNANT SPINAL CORD COMPRESSION: EXPERIENCE FROM A LOCAL PALLIATIVE CARE UNIT

Dr Chan Chung On, Department of Medicine, Haven of Hope Hospital (December 2015 Palliative Medicine Exit Assessment Exercise)

Background Being an uncommon oncological complication, few studies addressed the palliative care needs of patients with malignant spinal cord compression (MSCC).

Objective 1) To identify the palliative care needs of patients with MSCC. 2) To identify factors associated with poor outcomes.

Material and Methods A retrospective review of patients with diagnosis of MSCC deceased during the period from July 2008 to June 2015 was undertaken. Demographic data and clinical data were analyzed.

Results Eighty patients were eligible for analyses. After MSCC, only 36.25% of patients preserved mobility, which was associated with age, time from neurological symptom onset to diagnosis, premorbid ambulation and albumin. Pain (91.25%), impaired appetite (82.5%), impaired wellbeing (76.25%), tiredness and depression were prevalent. Bladder catheterization (75%), urinary tract infection (61.25%), pressure ulcer (61.25%) and chest infection were common. The median survival was 112 days, and the median length of hospital stay over the period of survival was 72.7% indicating high hospital dependency. Presence of metastases, >1 MSCC sites, premorbid ambulation and intervention were associated with survival. Maid availability and place of residence were associated with hospital dependency. Post-MSCC ambulation, hemoglobin, albumin and alkaline

phosphatase level were associated with both. Multivariate regression showed ambulation after MSCC predicted both survival and hospital dependency.

Conclusion Majority of patients with MSCC had significant functional impairment, high symptom burden, prevalent complications, short survival and high hospital dependency. Prompt diagnosis and intervention were important in improving functional outcome and survival. Exploration of their psycho-spiritual needs would be an area of interest.

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PRIMARY SJÖGREN'S SYNDROME - EVALUATION OF THE CLINICAL AND LABORATORY MANIFESTATIONS OF A COHORT OF PATIENTS WITH PRIMARY SJÖGREN'S SYNDROME

Dr Chan Ching Man Vivien, Department of Medicine & Geriatrics, United Christian Hospital (December 2015 Rheumatology Exit Assessment Exercise)

Introduction Primary Sjögren's syndrome (PSS) is one of the most common systemic autoimmune diseases. However there is a lack of local data on PSS. This study aims to evaluate a local population of PSS patients regarding the clinical and laboratory manifestations and in particular, two recently developed assessment indices: The European League Against Rheumatism (EULAR) Sjögren's Syndrome Disease Activity Index (ESSDAI) and the EULAR Sjögren's Syndrome Patient Reported Index (ESSPRI).

Method PSS patients who fulfilled American–European Consensus Group classification criteria of 2002 were invited for questionnaire of ESSPRI and ESSDAI. Demographic characteristics, clinical and laboratory data were gathered for evaluation and statistical analyses.

Result Forty-nine patients were recruited. The mean age was 55.5 years and mean age of onset of PSS was 45.8 years. There was a mean delay of 4.8 years to the diagnosis of PSS. Tooth decay and loss were present in 87.8% and 63.3% of patients respectively. Prevalence of systemic involvement was 88.8%. Abnormal immunological test results including hypocomplementaemia and cryoglobulinaemia were present in 71.4% of patients. Articular symptoms were also frequent, involving 51% of patients. The patients were being characterized by ESSPRI and ESSDAI, and the scores were similar to those of other large series.

Conclusion Our local PSS patients resembled those reported in literature. Systemic and glandular features are common but the diagnosis is often being delayed. ESSPRI and ESSDAI serve as useful indices for evaluating disease condition.

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PREVALENCE AND RISK FACTORS OF OSTEOPOROSIS AND LOW BONE MINERAL DENSITY IN PATIENTS WITH ANKYLOSING SPONDYLITIS IN HONG KONG: A CROSS-SECTIONAL STUDY

Dr Ho Yan Sze Cindy, Department of Medicine & Geriatrics, Princess Margaret Hospital (December 2015 Rheumatology Exit Assessment Exercise)

Objective To determine the prevalence and risk factors of low bone mineral density (BMD) in a local cohort of ankylosing spondylitis (AS) patients. Dual X-ray absorptiometry (DXA) scan at different sites were compared and evaluated.

Methods Ninety-two patients with AS were enrolled in this study. Clinical, demographic and radiological data were collected. Erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), Bath AS Disease Activity Index (BASDAI), Bath AS Functional Index (BASFI), Ankylosing Spondylitis Disease Activity Score (ASDAS), Patient and Physician global scores, Health Assessment Questionnaire (HAQ) and Bath AS Metrology Index (BASMI) were

evaluated. BMD at the lumbar spine via antero-posterior (AP) and lateral projections, neck of femur (NOF) and total hip were measured.

Results Low BMD was found in half of the 92 Chinese AS patients. Factors associated with low BMD were BASDAI, BASMI, post-menopausal status, body mass index (BMI), alcohol use and family history of AS. Multiple logistic regression analysis by backward selection revealed that BASDAI (odds ratio (OR) 1.03, 95% confidence interval (CI)1.00-1.06; $p = 0.031$), post-menopausal status (OR 6.11, 95% CI 1.07-34.81; $p = 0.041$), BMI (OR 0.81, 95% CI 0.71-0.93; $p = 0.003$) and alcohol use (OR 4.79, 95% CI 1.49-15.38; $p = 0.008$) were significantly associated with low BMD. Total hip BMD was more sensitive than AP lumbar BMD in detecting low BMD in AS.

Conclusion Low BMD in AS is not uncommon and often underdiagnosed. BASDAI, post-menopausal status, alcohol use and BMI were independently associated with low BMD in this study.

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Note: For obtaining the full dissertation, please contact the author directly.