Abstracts of Dissertations December 2007 Exit Assessment Exercise

RISK FACTORS OF PEPTIC ULCER DISEASE IN LOCAL HONG KONG CHINESE PATIENTS

Dr Chau Wai Ming, Department of Medicine & Geriatrics, Tuen Mun Hospital (December 2007 Advanced Internal Medicine Exit Assessment Exercise)

Background Helicobacter pylori, NSAID and smoking are major risk factors for peptic ulcers. The prevalence and relevance of these risk factors varies among different countries.

Aim This study was designed to examine the association between peptic ulcers and H. pylori infection, NSAID use, smoking and age in local Chinese population. Idiopathic peptic ulcers would be identified and their proportion to all ulcers would be estimated.

Methods 187 dyspeptic patients underwent upper endoscopy in Medical Department of Tuen Mun Hospital were selected in our retrospective case control study and their risk factor profile analyzed.

Results Out of 187 adult dyspeptic patients, 16.6% had peptic ulcer. H. pylori was found in 40% of gastric ulcers (GU) patients, 71.4% of duodenal ulcers (DU) patients and 33.1% of the whole sample. NSAID was used by 43.8% of GU patients, and 35.7% of DU patients and 21.9% of the whole sample. Both H. pylori and NSAID are related to peptic ulcerations significantly, their odds ratios (OR) are 3.27 and 3.11 respectively. Only H. pylori infection predicts the risk of DU (OR=7.02) whereas only NSAID predicts the risk of GU (OR=4.03). Smokers were infected with H. pylori in 66.7%, whereas non-smokers were infected at significantly lower rate (29.8%) (P<0.01).

Conclusion Based on multivariable logistic regression analysis, we conclude that: 1) Both H. pylori infection and NSAID play major roles in the pathogenesis of peptic ulcerations; and 2) about 19.4% of peptic ulcers in our study sample are unrelated to H. pylori and NSAID use (idiopathic ulcers).

A RETROSPECTIVE REVIEW OF THE QUALITY OF WARFARIN MANAGEMENT AT AN ANTICOAGULATION CLINIC

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Dr Ho Ping Cheong, Department of Medicine & Geriatrics, United Christian Hospital (December 2007 Advanced Internal Medicine Exit Assessment Exercise)

Objective To evaluate the quality of anticoagulation control and major complication rate; to assess whether shortening of INR monitoring to monthly improves anticoagulation control at an anticoagulation clinic of a regional hospital.

Methods Retrospective review of the medical records 200 patients followed up the anticoagulation clinic from July 2005 to March 2007. Outcome measures were anticoagulation control as reflected by percentage of patient time and INR tests in the therapeutic range and major complication rate. Anticoagulation control and clinic visit interval were compared before and after implementing the 4-weekly INR testing recommendation since September 2006.

Results The study included 115(57.5%) females and 85(42.5%) males with a mean age of 68.2±12.4 years following up for 306 treatment years. The most common indication for

warfarin was atrial fibrillation (62.5%). A total of 3016 INR tests were performed during the study and the mean time interval of INR tests were 5.31±1.2 weeks. The overall percentage of patient time and INR test in range was 78.2% and 77.5%, respectively. Patients with lower desired target INR range achieved better anticoagulation control (p<0.001). After implementing the 4-weekly INR checking recommendation, the mean INR monitoring interval was shortened from 5.7±1.3 weeks to 4.5±1.3 weeks. The percentage of time in range increased from 78.9% to 83% (p=0.049) and the proportion of tests in range increased from 77.9% to 82.2% (p=0.03).Major bleeding and thromboembolic complications occurred at 2% and 2.6% per patient treatment year. Four patients died because of thromboembolic complication, giving a treatment related mortality rate of 1.3% per treatment year.

Conclusions Quality of anticoagulation control and major complication rate found in this study are comparable to the results from published studies. Monthly INR testing is feasible in our anticoagulation clinic and it significantly improves the control of anticoagulation. Telephone follow up service and patient self-testing and monitoring can be explored in order to deal with the increasing workload of the clinic.

EXTRAMAMMARY PAGET'S DISEASE - A CLINICAL AND IMMUNOHISTOCHEMICAL STUDY OF 50 CASES IN HONG KONG

Dr Chan Pui Yiu Nicola, Social Health Service, Department of Health (December 2007 Dermatology & Venereology Exit Assessment Exercise)

Background Extramammary Paget's disease (EMPD) is an uncommon cutaneous neoplastic condition which can be associated with underlying internal malignancies. It predominantly affects anogenital regions in the elderly population. Immunohistochemistry has been shown to be useful for distinguishing EMPD of cutaneous origin (primary EMPD) from those of extracutaneous origin with associated malignancies (secondary EMPD). Limited data is available on the disease's profile in the local Chinese population.

Aim This study aimed to review the epidemiology, clinicopathological features, associated malignancies, treatment and outcome of EMPD in the local population. It also examined the immunohistochemical profile of the cases with a panel of markers consisting of cytokeratin 7 (CK7), cytokeratin 20 (CK20) and gross cystic disease fluid protein-15 (GCDFP-15). The differences in profile between primary and secondary EMPD were studied.

Methods A retrospective, multi-center, case cohort study was carried out to review newly diagnosed EMPD cases between 2000 and 2005 from the Social Hygiene Service, Queen Mary Hospital, Queen Elizabeth Hospital and Prince of Wales Hospital. Immunohistochemical analyses with CK7, CK20 and GCDFP-15 were performed for all cases.

Results Fifty patients were recruited in this study. All the patients were Chinese. The male-to-female ratio was 2.3:1, and the mean age at diagnosis was 72.84. Majority of the patients presented with pruritis. The penoscrotal region was the commonest site of involvement. 84% of patients had primary EMPD, and 8% had secondary EMPD associated with concurrent internal malignancies. Immunohistochemical phenotype of CK7+/CK20-/GCDFP-15+ was observed in the majority of primary EMPD, whereas CK7+/CK20+/GCDFP-15+, CK7-/CK20-/GCDFP-15- and CK7+/CK20+/GCDFP-15- were seen in secondary EMPD associated with carcinoma of the anus, rectum and colon.

62% of patients underwent wide local excision, and 20% received radical radiotherapy as their first-line treatment. A 27.5% recurrence rate was seen in the 80% of patients who achieved clinical remission with a mean follow-up of 32.12 months. 18% of patient died of EMPD or related malignancy. Primary EMPD had a better cumulative survival compared to secondary EMPD.

Conclusion The present study represented the largest conducted on a Chinese population. Although the disease behaviour was similar to the Caucasian in many aspects, EMPD in Chinese appeared to have a male predominance with frequent involvement of the penoscrotal site. Furthermore, secondary EMPD appeared to be less common in Chinese compared with Caucasian. CK7, CK20 and GCDFP-15 as a panel were useful in differentiating primary from secondary EMPD.

RADIOACTIVE IODINE TREATMENT OF HYPERTHYROIDISM: PROGNOSTIC FACTORS FOR TREATMENT OUTCOME IN TUEN MUN HOSPITAL

Dr Cheung Fu Keung, Department of Medicine & Geriatrics, Tuen Mun Hospital (November 2007 Endocrinology, Diabetes and Metabolism Exit Assessment Exercise)

Objective To assess the effectiveness of radioactive treatment and to evaluate the prognostic factors affecting outcome of thyrotoxic patients treated with an empirical dose regime in Tuen Mun Hospital, a regional hospital of New Territories West Cluster (NTWC)

Patients & Methods A retrospective study of 126 patients with a diagnosis of thyrotoxicosis referred to Clinical Oncology Department of Tuen Mun Hospital for RAI between 1st Jan to 30th June 2005 was performed. Treatment success rate after single dose of Iodine-131 was investigated and was defined as euthyroid after all treatment off at 6 months or thyroxine replacement for biochemical hypothyroidism. Patients' clinical notes and computer management system (CMS) records were reviewed. Pretreatment clinical, biochemical parameters, effect of pre-treatment with antithyroid medications before RAI were also studied and evaluated to identify predictors of successful outcomes. The cumulative incidence of early post-RAI hypothyroidism at 6 & 12 months was also studied.

Results For the 122 patients eligible for analysis, the treatment success rate at 6 months after RAI was 70.5%. Female sex was significantly associated with treatment success. The cumulative rate of hypothyroidism at 6 & 12 months after RAI was 37.7 & 42.6% respectively.

Conclusion The treatment effectiveness and risk of post-RAI hypothyroidism is comparable to studies in other institutions. The fixed dose method is considered an efficient, cost-effective & convenient way of radioactive iodine treatment to patients in NTWC. Female sex is found to be an independent prognostic factor for treatment outcomes at 6 months after radioactive iodine.

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SERUM VITAMIN B12 STATUS OF METFORMIN TREATED DIABETIC PATIENTS

Dr. Lam Siu Fung, Department of Medicine & Geriatrics, Princess Margaret Hospital (November 2007 Endocrinology, Diabetes and Metabolism Exit Assessment Exercise)

Objective The aim of the study is to compare the serum B12 level between metformin-treated & non-metformin treated type 2 diabetic patients

Methods This is an observational, cross-sectional controlled study. Type 2 diabetic patients who were treated with metformin for over 1 year or more were recruited (n=100) as the study group. Those who were never treated with metformin or with the drug stopped for 1 year or more were recruited as the control group (n=100). Their serum B12 levels, hemoglobin levels, mean corpuscular volume of red blood cell (MCV) were measured. Other parameters such as the latest haemoglobin (HbA1c), creatinine level, body mass index (BMI), duration of diabetes & duration of metformin therapy were also checked. The parameters were compared between 2 groups & multiple linear regression analysis was performed to identify any independent predictor of serum B12 level.

Results The study revealed that there was significant difference of serum B12 level between metformin & non-metformin treated diabetic patients. (205 (149-291) pmol/L vs 289 (238-420) pmol/L p< 0.001). The length of metformin therapy was found to be the strongest predictor of the B12 level in the metformin treated patients. Eleven out of ninety-seven metformin treated patients had serum B12 level equal to or less than 107 pmol/L which is defined as deficient state according to the manufacturer of the B12 assay. The prevalence of B12 deficiency in the metformin group is 11.34%. None of the patients from the control group had serum B12 levels equal to or less than 107 pmol/L

Conclusions There was significantly lowered serum B12 level in metformin treated patients compared to non-metformin treated patients. The prevalence of abnormally low serum B12 level in metformin treated patients was 11.34 %. Serum B12 level was inversely correlated with the duration of metformin therapy.

NATURAL HISTORY OF HBeAg SEROCONVERSION IN PATIENTS WITH CHRONIC HEPATITIS B

Dr Fung Yan Yue James, Department of Medicine, Queen Mary Hospital (December 2007 Gastroenterology and Hepatology Exit Assessment Exercise)

Chronic hepatitis B (CHB) infection continues to be a major health burden in the Asia-Pacific population, with endemic rates of infection. In endemic regions, CHB accounts for the majority of cases of liver cirrhosis, decompensated liver disease and hepatocellular carcinoma. Although there is no cure available at the present time, effective and potent antiviral therapies are available and newer antiviral therapies are likely to become available in the near future. Therefore it is important to understand the natural history of CHB infection in order to identify patients who would benefit from closer monitoring of their diseases, and those patients who should receive antiviral medication.

Currently there are guidelines for the treatment of CHB, and these have evolved over time to accommodate for the increasing understanding into the natural history of CHB infection. There are limitations to these guidelines however as the natural history of CHB differs with different ethnic groups and also at the age of viral acquisition.

It is now known that HBeAg seroconversion may not be an adequate treatment end-point as a significant proportion of Chinese CHB patients will have underlying severe fibrosis and cirrhosis. Furthermore the risk of hepatocellular carcinoma remains high for those patients aged over 40 years.

A RETROSPECTIVE STUDY ON DYSLIPIDEMIA IN CHINESE ELDERLY WITH ISCHEMIC STROKE

Dr Cheng Hon Kuen, Department of Rehabilitation, Kowloon Hospital (December 2007 Geriatric Medicine Exit Assessment Exercise)

Background Stroke is a leading cause of death and disability with dyslipidemia as one of the modifiable risk factors. In prior observational cohort studies, the association between cholesterol level and risk of ischemic stroke was only weakly positive. However, the results of recent clinical trials suggested that stroke might be reduced by the administration of lipid lowering agents. And tight control of dyslipidemia was recommended for secondary prevention of stroke in recent guidelines.

Objectives To study the prevalence of dyslipidemia among the Chinese stroke elderly in Hong Kong, review the use of lipid lowering agents in our clinical practice and examine the relationship between lipid control and outcomes of stroke.

Design Retrospective study, 4 years.

Setting Tertiary rehabilitation unit specializing in stroke rehabilitation

Participants 396 in-patient Chinese elderly (Age ≥60) with acute ischemic stroke.

Main outcomes measures Demographic characteristics, prevalence of dyslipidemia; number of patients received lipid lowering agents, number of patients achieved the recommended target lipid level, rate of recurrent ischemic stroke, rate of intracranial hemorrhage and mortality within 4 years.

Results Of 396 stroke patients, dyslipidemia was presented in 368 patients (92.9%). 73 of those patients (19.8% from 368) received lipid lowering agents throughout 4 years of follow up. Only 24 of them (6.5% from 368) received lipid lowering agents throughout 4 years of follow up and achieved the target low density lipoprotein-cholesterol (LDL-C) level according to American Heart Association (AHA) / American College of Cardiology (ACC) Guideline for Prevention of Stroke in Patients with Ischemic Stroke or Transient Ischemic Attack 2006. In these 24 patients, 16 patients (66.7%) received statins and 8 patients (33.3%) received fibrate. Smaller proportion of very old elderly (age \ge 75) were adequately treated (20.8% versus 51.5%, p<0.01). Rate of recurrent of stroke within 4 years was significantly lower in those adequately treated (4.2% versus 23.3%, p<0.05, 4 year absolute risk reduction: 19.1%). Meanwhile, the incidence of intracerebral hemorrhage (4.2% versus 2.9%, p=NS), subarachnoid hemorrhage (0% versus 0.3%, p=NS) and subdural hematoma (4.2% versus 0.3%, p=NS) within 4 years were not statistically significant increased. Furthermore, the 4 years mortality was significantly lower in those adequately treated patients (4.2% versus 29.1%, p<0.01, 4 year absolute risk reduction: 24.9%). Adequate treatment of dyslipidemia was a negative predictor for recurrent stroke and mortality.

Conclusion Most Chinese stroke elderly (92.9%) suffered from dyslipidemia. Our results showed major deficiency in the delivery of lipid lowering therapy after stroke in our clinical practice. Only approximately one-fifth of these high-risk elderly patients received lipid-lowering agents. Large proportion of stroke elderly (93.5%) was not treated or under-treated for dyslipidemia. Besides, smaller proportion of very old elderly (age≥75)

was adequately treated. Moreover, following the AHA/ACC 2006 guidelines, tight LDL-C control was associated with a reduction of recurrent stroke and mortality for 4 years after stroke in Chinese elderly. Furthermore, the rate of intracranial hemorrhage was not significantly increased in patients with tight control of dyslipidemia.

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OLD AGE HOME ENHANCED SUPPORT PROGRAM IN A REGIONAL HOSPITAL IN HONG KONG

Dr Chuang Lai, Department of Medicine & Geriatrics, United Christian Hospital (December 2007 Geriatric Medicine Exit Assessment Exercise)

Objective To evaluate the feasibility of enhanced support care for old age home

Method Retrospective case review

Participants Residents of old age homes served by Kwun Tong community geriatric assessment team (CGAT), who attended the United Christian Hospital emergency department for pre-selected medical conditions including fever, decreased general condition, decreased oral intake, convulsions in patients with history of epilepsy and coffee ground aspiration from feeding tubes.

Setting The program was run between October 2006 and March 2007. A liaison nurse was stayed in the emergency department for the coordination of the program. Patients were referred to the program by emergency physicians if they presented with the target conditions and fulfill the inclusion and exclusion criteria. After patients discharged directly form emergency department, geriatric medical officers and community nurses would follow up the patients in old age home within two working days.

Results Thirty-four cases were referred by emergency physicians to the enhanced support program. Out of these thirty-four cases, twenty-seven cases (79.4%) were discharged directly from emergency department; seven cases (20.6%) were subsequently admitted after consultation in the emergency department. Twenty seven patients successfully discharged directly. During the first week after direct discharge from the emergency room, most of the patients need three visiting medical officer (VMO) follow up and three community nurse (CNS) visits (range from 0-4) visits.

Conclusions Our results support consideration of enhanced support program as having a place in the health care system of the future. Further study is suggested to determine the intensity of care needed after direct emergency department discharge. Studies about different clinical conditions should also be considered.

PRESCRIPTION PREFERENCE ON ANTITHROMBOTIC THERAPY IN ELDERLY PATIENTS WITH NONVALVULAR ATRIAL FIBRILLATION

Dr Ng Wing Ling Winnie, Department of Medicine & Geriatrics, Yan Chai Hospital (December 2007 Geriatric Medicine Exit Assessment Exercise)

Background The elderly population at risk for thromboembolic disease, including venous thromboembolism and systemic thromboses, is rapidly expanding because of increased longevity and improved therapy for cardiovascular disease. Warfarin was shown to provide effective protection against ischaemic stroke in patients with atrial fibrillation. Despite this, antithrombotic drugs, particularly oral anticoagulants are still underused in

older patients. There are concerns that the elderly population may be subject to a greater risk of haemorrhagic complications and are more prone to fall. Factors like polypharmacy, limited cognition and poor social support also affect the decision making on choice of antithrombotic therapy. This study is designed to determine the prescription preference and the influence of multidisciplinary factors that affect the choice of different antithrombotic therapy in the frail elderly population.

Design A retrospective study in a regional hospital in Hong Kong. Patients aged above 80 with a principal or secondary discharge diagnosis of nonvalvular atrial fibrillation in 2006 were identified by computer-based Clinical Management System. Medical records were reviewed; the choice of antithrombotic therapy and the reasons behind were investigated and analyzed.

Results A total of 151 elderly were included in the study. Of these, 80.3% patients were prescribed an antithrombotic agent at discharge. Aspirin was the most frequently used therapy (67.2%), followed by warfarin (10.2%). 19.7% patients received no antithrombotic therapy. Underuse of anticoagulants is common. Physicians tend to start warfarinization in relatively young, ambulatory and non age-home patients. In contrary, no antithrombotic therapy is preferred for relatively old, bed/chair bound age home resident. Low drug dosage and intermediate INR intensity were widely accepted in treating very elderly patients.

Conclusion Despite consensus guidelines to treat all atrial fibrillation patients aged 75 and older with warfarin, multiple factors including mobility, social support, limited cognition, compliance problem and polypharmacy should also be taken into consideration in choosing the most appropriate antithrombotic therapy in frail elderly population.

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COGNITIVE OUTCOME IN ELDERLY PATIENTS WITH COGNITIVE IMPAIRMENT AND VITAMIN B12 AND/OR FOLATE DEFICIENCY AFTER REPLACEMENT THERAPY

Dr Yau Zi May Susan, Department of Medicine, Queen Mary Hospital (December 2007 Geriatric Medicine Exit Assessment Exercise)

Background Vitamin B12 and folate deficiency are common in the elderly. Few studies have examined the effects of vitamin B12 or folate supplementation on cognition in individuals with dementia.

Objectives To study the cognitive outcome and to identify factors associated with deterioration in cognitive performance in elderly Chinese patients with cognitive impairment and vitamin B12 and/or folate deficiency, following replacement therapy.

Methods The retrospective follow-up study, with follow-up from June 1996 to December 2006, was conducted at Queen Mary Hospital Geriatric Memory Clinic. Out of the 1285 patients who consulted the clinic, 118 (9.2%) were confirmed to have cognitive impairment, and vitamin B12 and/or folate deficiency on treatment. Cognitive function at baseline and following vitamin B12 and/or folate supplementation was assessed using the Mini-Mental State Examination (MMSE). The primary outcome was cognitive outcome, as measured by the change in MMSE score from baseline to last visit.

Results The overall cognitive outcome was an annual deterioration in MMSE score by 1.39 \pm 5.56. Potential independent risk factors for poor cognitive outcome are a high Clinical Dementia Rating score (odds ratio 3.19; 95% confidence interval 1.55-6.54; p=0.002) and

the presence of cortical cerebrovascular event (odds ratio 5.10; 95% confidence interval 1.47-17.75; p=0.01) at baseline.

Conclusion Overall, cognitive outcome in elderly individuals with cognitive impairment and deficiency of vitamin B12 and/or folate shows deterioration despite replacement therapy. However, the cognitive outcome in some individuals may be amenable to improvement with vitamin supplementation, especially if the cognitive impairment is mild.

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A RANDOMIZED SINGLE-CENTER TRIAL OF MYCOPHENOLATE MOFETIL FOR THE PROPHYLAXIS OF ACUTE GRAFT-VERSUS-HOST DISEASE IN HIGH-RISK ALLOGENEIC STEM CELL TRANSPLANTATION

Dr Cheung Wing Wai, Winnie, Department of Medicine, Queen Mary Hospital (November 2007 Haematology and Haematological Oncology Exit Assessment Exercise)

Background Graft-versus-host disease (GVHD) causes significant morbidity and mortality after allogeneic hematopoietic stem cell transplantation (HSCT).

Aim To evaluate the use of mycophenolate mofetil (MMF), in addition to standard GVHD prophylaxis regimen of cyclosporine (CsA) and methotrexate (MTX), in patients undergoing myeloablative HSCT with HLA-mismatched or unrelated donors.

Methods Sixty patients were randomized 1:1 to receive standard GVHD prophylaxis only (control group) or with addition of 2g MMF daily from day 0 to 60 (MMF group).

Results Hematopoietic engraftment occurred in all patients. The MMF group had lower incidence of grade I-IV acute GVHD [9/30 (30%) vs 19/30 (63.3%) respectively, p = 0.02 by log-rank], and grade III-IV acute GVHD [1/30 (3.3%) vs 6/30 (20%) respectively, p = 0.03 by log-rank] when compared with control group. More patients in the control group required corticosteroid use for treatment of acute GVHD [18/30 (60%) vs 10/30 (33.3%) respectively, p = 0.04 by log-rank] compared with MMF group. Disease relapse rate, 100-day mortality and overall mortality were comparable between the two groups (all p = NS).

Conclusions The addition of MMF to standard GVHD prophylaxis of CsA and MTX resulted in less acute GVHD, corticosteroid use and CMV reactivation. MMF was well tolerated and did not negatively impact on hematopoietic engraftment or survival.

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CLINICAL PRESENTATION AND OUTCOMES OF ADULTS WITH BURKITT AND BURKITT-LIKE LYMPHOMA IN HONG KONG - TWO REGIONAL HOSPITALS' EXPERIENCE AND LITERATURE REVIEW

Dr. Li Wa, Department of Clinical Oncology, Prince of Wales Hospital (November 2007 Haematology and Haematological Oncology Exit Assessment Exercise)

Background Burkitt and Burkitt-like lymphoma are highly aggressive neoplasms whose clinical course has not been well defined in the Hong Kong population. The management of these rare disorders is complicated by variable clinical presentation, multiple staging classifications and many different treatment options. At present, there have been no reported series on adult patients in Hong Kong.

Methods This is a descriptive study on a case series of twenty-five previously untreated

patients with a diagnosis of Burkitt or Burkitt-like lymphoma. The study patients were collected retrospectively from two university hospitals from 1999 to 2006. Patients' demographic, clinical, laboratory, chemotherapy regimens and survival data were analyzed. The Fisher exact test was used to compare the treatment toxicities and outcome between Stanford regimen and the modified CODOX-M/IVAC regimen.

Results The median age of the cohort was 52 with a median follow-up time of 19.7 months. Gastrointestinal (36%) and lymph node (28%) regions were the principle sites of involvement. At presentation 52% of the study patients had Ann Arbor stage IV disease, 28% had marrow and 16% had central nervous system (CNS) infiltration. Eight patients received Stanford regimen and twelve received modified CODOX-M/IVAC regimen. Patients on Stanford regimen experienced less grade 3-4 thrombocytopenia in comparison with patients on CODOX-M/IVAC regimen (P=0.019). The 1-year progression-free survival (PFS) and 1-year overall survival (OS) rate for the cohort was 60% and 68% respectively. The 1-year PFS for patients received Stanford and CODOX-M/IVAC regimens were 75% and 50% respectively (P=0.64) and the 1-year OS were 87.5% and 50% respectively (P=0.32).

Conclusion Burkitt and Burkitt-like lymphoma are rare among adult population in Hong Kong. Patients usually presented with an advanced stage of disease with bulky and widespread involvement. High complete remission and survival rate can be achieved even in patients with stage IV disease. The study demonstrated that the Stanford regimen is an effective and well tolerated protocol in the local Chinese population.

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A STUDY ON THE DIAGNOSIS OF DEPRESSION IN PATIENTS UNDERGOING STROKE REHABILITATION IN AN EXTENDED CARE UNIT IN HONG KONG

Dr Cheung Yuet Chow, Geriatrics and Rehabilitation Unit, Haven of Hope Hospital (December 2007 Rehabilitation Exit Assessment Exercise)

Background and aim: Post stroke depression (PSD) has a high prevalence rate and carries adverse impact on rehabilitation outcomes and mortality. The study aims to evaluate the limitation of diagnosis of PSD by physician assessment alone. The risk factors for post stroke depressive symptoms (DS) will also be examined.

Method

Part I this is a retrospective review of records of 100 inpatients receiving stroke rehabilitation. The occurrence of PSD and the diagnostic process will be examined.

Part II this is a prospective study to evaluate the usefulness of geriatric depression scale (GDS) to screen for depressive symptoms in a cohort of patients for stroke rehabilitation who were not suspected of depression by the physician. The prevalence of post stroke depressive symptoms will be assessed; the relation between demographic and clinical data and depressive symptoms will be examined.

Results

Part I 9 of the 100 patients were suspected of depression by the treating physician, GDS was administered based on clinical suspicion in 8 patients, 7 had GDS scored in the depressive range, 1 was diagnosed PSD. Out of the 100 patients reviewed, 2 patients were diagnosed with PSD.

Part II 7 patients were suspected of depression by physician in charge, 3 of them

were diagnosed PSD. Of the remaining 28 not suspected of depression, 12 of them scored higher than cut off score for presence of depressive symptoms and 2 of them were diagnosed PSD. Total 5 (14.3%) of the 35 patients were diagnosed with PSD, 3(8.6%) by physician assessment alone and an additional 2 patients (5.7%), not initially suspected of depression, after administered GDS by investigator, was diagnosed by the physician-in-charge by further clinical assessment based on the GDS result. The prevalence of DS in the whole group was 48.6%. Barthel index on admission and discharge was the only clinical variable associated with post stroke depressive symptoms.

Conclusion The prevalence of post stroke depressive symptoms is 48.6%. Diagnosis by physician assessment alone had missed 40% of PSD. Barthel index on admission and discharge, length of stay in HHH were the risk factors associated with post stroke depressive symptoms.

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MULTI-DISCIPLINARY REHABILITATION OF CHRONIC PAIN—A LOCAL PERSPECTIVE

Dr Wah Shu Hong, Geriatrics, Pulmonary & Palliative Care Unit, Haven of Hope Hospital (December 2007 Rehabilitation Exit Assessment Exercise)

Chronic pain is a common disease entity among workers that causes morbidities both at individual and societal level. Multidisciplinary rehabilitation program with cognitive behavioral therapy component has gained much recognition in management of these patients in developed countries.

A pilot program consists of 6 weeks of multidisciplinary day rehabilitation program was commenced in Kowloon East Clusters to assess it's efficacy in relieving pain, econditioning, restoration of function and other psychological and emotional parameters.

Attempt was made to study the interactions among these variables and any baseline demographic characteristics or variables that might affect or predictive the outcome of rehabilitation.

Background

Chronic pain was formerly defined as pain that has lasted for more than 6 months. More recently it has been defined as pain that persists longer than the temporal course of natural healing or disease process.

The International Association for the Study of Pain defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage. Pain is subjective in nature and is defined by the person experiencing it whose mind is also impacted by processing and interpreting pain signals.

The dorsal horn is the first relay station in pain signal transmission in the Peripheral Nervous system. Then it transmits signals to the thalamus where the next orders of neurons ascend to the limbic system and sensory cortex. This accounts for the affective elements of pain

Persistent activation of nociceptive transmission to the dorsal horn may induce a "wind up" phenomenon. This induces pathological changes that lower the threshold for transmission of pain signals. It may also generate nonnociceptive nerve fibers in respond to pain signals that is itself may generate and transmit pain signals. Once "wind up "is established it is

difficult to reverse. Enhanced transmission to the brain is also associated with the loss of discriminatory processing of noxious and innocuous stimuli. The increased flow of abnormally processed signals may also overcome the ability of descending modulator pathways to produce analgesia, causes further worsening of the pain.

Chronic pain persist despite the initial insult has gone or ongoing pathology has been controlled – e.g. arthritis, cancer, and infection. Common chronic pain complaints include headache, low back pain, cancer pain, arthritis pain, and neuropathic pain.

Chronic pain is often misdiagnosed. Patients are often ignored, labeled and their pain dismissed as imaginary, somatisation or even malingering. Patients, particularly the ones being prescribed opioids, are sometimes labeled as drug addicts.

Chronic pain may generate affective symptoms of depression and anxiety. It may precipitate decreased physical activity given the apprehension of exacerbating pain. It may also cause psychosomatic or psychogenic symptoms.

It is rare to completely abolish chronic pain. Thus, the clinical goal is pain management or control. Many authors has research into this topic and suggested that multidisciplinary model of comprehensive pain program (CPPs) offers the most efficacious and cost-effective treatment for persons suffering with chronic pain

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