



Hong Kong College of Cardiology

Journal of the Hong Kong College of Cardiology

Manuscript 1499

9th Asian Preventive Cardiology and Cardiac Rehabilitation Conference
Symposia

Follow this and additional works at: <https://www.jhkcc.com.hk/journal>



Part of the [Cardiology Commons](#), [Cardiovascular Diseases Commons](#), and the [Medical Education Commons](#)

9th Asian Preventive Cardiology and Cardiac Rehabilitation Conference



9TH ASIAN PREVENTIVE CARDIOLOGY AND CARDIAC REHABILITATION CONFERENCE

Journal of the Hong Kong College of Cardiology 2023;30(1):i 1–38
<https://doi.org/10.1016/j.jhkcc.2022.05.023>

Symposium 1-Cardiovascular Risk Factors Symposium I 1. Treatment of drug-refractory hypertension by renal denervation

Cheng Yuet-Wong

Queen Elizabeth Hospital, Hong Kong

Hypertension is an important cardiovascular risk factor and one of the commonest chronic diseases in Hong Kong. Uncontrolled hypertension can lead to stroke, myocardial infarction, heart failure, peripheral artery disease, end-stage renal disease and premature death.

Patient with uncontrolled hypertension may suffer from Resistant Hypertension. It is defined as the failure to achieve BP 'control' to levels below 140/90 mm Hg despite treatment with three antihypertensive medications with complementary mechanisms of action (with at least one diuretic). The diagnosis of resistant hypertension requires assurance of antihypertensive medication adherence, excluding the "white-coat effect" and any secondary cause of hypertension.

The talk focuses on the introduction of renal denervation, which is a catheter-based treatment for resistant hypertension. It also covers the latest results of clinical trials, its antihypertensive mechanism, and how it can be incorporated into hypertension treatment strategies.

Symposium 1-Cardiovascular Risk Factors Symposium I 2. Dosing Strategy of Non-Vitamin K Antagonist Oral Anticoagulants in stroke prevention in atrial fibrillation

Chao Tze-Fan

National Yang-Ming University, Chinese Taipei

Atrial fibrillation (AF) is associated with a 3-5 fold higher risk of ischemic stroke, and therefore, stroke prevention with oral anticoagulants (OACs) is central to the management of patients with AF. Non-vitamin K antagonist OACs (NOACs) have emerged as the preferred anticoagulant option for stroke prevention in AF (SPAF) in the last decade. Since routine monitoring of drug concentration is not necessary for NOACs, the selection of appropriate dose of NOACs according to the dosage criteria defined in randomized controlled trials (RCT) or labelling is very important. However, prescriptions of off-label dosing NOACs remained as a major problem in the daily practice.

Several factors, such as old age, chronic kidney disease and prior history of bleeding, would impact on clinical physicians' choices of certain dosing of NOACs. Since the Asian population is associated with a higher bleeding risk such as intracranial hemorrhage, physicians generally tend to prescribe low-dose NOACs for Asian AF patients in the clinical practice. In this lecture, we will discuss the complementary data from RCT and real-world evidence that support NOAC treatment in AF patients. Also, we will discuss data regarding the associations between dosing of NOACs and clinical outcomes, and emphasize the importance of on-labelling dosing NOACs in SPAF.

Symposium 2 - Hong Kong Heart Foundation Symposium 3. Cardiac rehabilitation around the world during COVID pandemic

Sherry Grace

York University, Canada

The (1) early and (2) late impacts of COVID-19 on CR delivery around the globe, including effects on providers and patients, as well as (3) implications and recommendations for delivery in the current peri-COVID era will be described. Through a cross-sectional study, a piloted survey was administered to CR programs globally early in the pandemic. The 50 members of the International Council of Cardiovascular Prevention and Rehabilitation (ICCP) facilitated program identification. Given known availability of CR, results suggest that approximately 4400 programs would have ceased service delivery globally. Alternative models were delivered in 40% of programs, primarily through low-tech modes (19%). 30% of respondents were re-deployed, and 37% felt the need to work due to fear of losing their job. 23% reported anxiety, 20% were concerned about exposing their family, 10% reported increased workload to transition to remote delivery, and 9% were juggling caregiving responsibilities.

Data from cardiac patients suggests the COVID waves are impacting their psychosocial well-being, and many have experienced major life stressors. In terms of heart-health behavior, there has been less exercise due to confinement, with associated weight gain, as well as increased substance use. Patients are avoiding preventive care visits and are having difficulty refilling prescriptions. This has resulted in worsening cardiac symptoms and risk factors, while at the same time these patients are often now needing to pay for remote CR as it is not reimbursed.

In the current era, we need to better understand the number of operating programs, through a repeat of ICCPR's Global Audit. We do know that programs that remain open are implementing new technologies to ensure their patients receive CR safely, despite the challenges such as access, digital literacy, cost, connectivity, and engagement. Safety protocols for remote exercise have been tried. Indeed, home-based CR is shown to be as safe and effective as centre-based.

Symposium 3 - Heart Failure Symposium I 4. Clinical Implications of SGLT2i in Heart Failure Across the Spectrum of LVEF

Ruldolf De Boer

University Medical Center Groningen, Netherlands

Treatments for heart failure with reduced ejection fraction (HFrEF) are well established with robust data and clinical guideline recommendations. However, effective treatments beyond HFrEF are very limited with a lack of guideline recommendations on therapies that can demonstrate clinical benefit in patients with heart failure with mildly reduced (HFmrEF) or preserved ejection fraction (HFpEF). Recently, the

status; health services, systems and policies, that all aspects influence planning of cardiac rehabilitation program for every patient.

Conclusion:

Variation in pre and post surgery cardiac rehabilitation among different age groups in children with CHD, could be support with functional diagnose with ICF-CY classification that pays attention to cardiopulmonary function and other potential obstacles in growth and development in order to make specific cardiac rehabilitation program for every pediatric CHD patient.

Keywords: Pediatric CHD, ICF-CY, Cardiac Rehabilitation

60

The effect of a Multicomponent Exercise on Cognition for the Older Survivors of COVID-19 in Residential Home

Ms. Hoi Wing Lee¹, Ms Yat Sum Poon¹

¹ Occupational Therapy Department, Caritas Li Ka Shing Care and Attention Home, Caritas Hong Kong - Service for the Elderly, Hong Kong SAR

Objectives:

This study investigated the effect of a Multicomponent Exercise on cognition for the older survivors of COVID-19 in the residential home in Hong Kong

Methods:

COVID-19 infection may cause neurological symptoms, functional and structural changes in the brain. Cognitive impairment and fatigue are commonly reported symptoms. Persistent fatigue in COVID-19 patients was frequently accompanied by cognitive dysfunction. Due to a wide variety and severity of COVID-19 symptoms, multicomponent Interventions were suitable and growing evidences suggested that cognitive, physical training and Qigong would be beneficial for the cognitive function and mental health of COVID-19 survivors. A Multicomponent Exercise (ME) combining Baduanjin Qigong, cognitive and physical training was designed by Occupational Therapists for the older survivors of COVID-19.

This study employed a single-armed pretest-posttest design. Twenty-five COVID-19 survivors (mean age : 87, 18 Female, 7 Male) with subjective complaints on fatigue and cognition indicated in cognitive evaluation simultaneously were recruited in a residential home in 2022. Participants were allocated to either 6-week ME group (n = 17) or educational group (n = 8, control group). ME Group was held 45 minutes each, twice a week. Educational group contained self-management strategies. The cognitive function was measured by the Chinese Version of Montreal Cognitive Assessment 5-minute Hong Kong Version (HK-MoCA 5-Min) at the baseline and after completion of groups.

Results:

All data were analyzed by Wilcoxon signed-rank tests. Both groups showed improvement in HK-MoCA 5-Min total scores, while improvement in ME group (z=-2879, p=0.004) was greater than the educational group (z=-2.023, p=0.043). When further analyzing the domain of HK-MoCA 5-Min, only the memory domain of ME group (z=-3.438, p=0.001) and orientation domain of educational group (z=-2.070, p=0.038) showed significant improvement.

Conclusion:

The findings indicate that the Multicomponent Exercise may have positive effects on global cognitive function and memory for the elderly recovered from the COVID-19 in the Residential Home.

Keywords

COVID-19, Cognition, Multicomponent Exercise

61

Prevalence of Modifiable Cardiovascular Disease Risk Factors among Cardiac Patients who were Enrolled on Cardiac Rehabilitation Programme for Secondary Cardiac Prevention in a Local Heart Centre in Malaysia

Dr. Chau Chung Chai^{1,2,3}, Dr. Be Kim Leong^{2,3}, Dr. Lin Kiat Liew^{2,3}, Dr. Kok Cheow Chow^{2,3}, Dr. Wu Kein Kevin Wong^{2,3}

¹ Rehabilitation Centre, Faculty of Medicine and Health Sciences, Universiti Malaysia Sarawak (UNIMAS), Kota Samarahan, Malaysia;

² Department of Rehabilitation Medicine, Sarawak Heart Centre, Kota Samarahan, Malaysia;

³ Department of Rehabilitation Medicine, Sarawak General Hospital, Kuching, Malaysia

Introduction:

One of the important goals of cardiac rehabilitation programme (CRP) is secondary cardiac prevention through managing modifiable CVD risk factors among cardiac patients. There were limited local studies on the prevalence of modifiable CVD risk factors among cardiac patients who were enrolled on CRP for planning and allocation of resources in resource-limited settings of local CRP in Malaysia.

Objective:

To determine the prevalence of modifiable CVD risk factors among cardiac patients who were enrolled on CRP for secondary cardiac prevention in Sarawak Heart Centre, Malaysia

Methodology:

This cross-sectional retrospective study involved 82 cardiac patients who were enrolled on CRP in Sarawak Heart Centre from June 2021 to May 2022. We analysed the patients' demographic data and the prevalence of their modifiable CVD risk factors when they were enrolled on CRP for secondary cardiac prevention. The selected modifiable CVD risk factors for analysis were based on latest "Malaysia clinical practice guideline (CPG) on primary and secondary prevention of CVD 2017" which included diabetes mellitus, hypertension, dyslipidaemia, overweight or obesity (BMI \geq 23), psychological factor (stress, anxiety or depression), active smoker, physical inactivity (less than the recommended level of 150 minutes per week of moderate-intensity physical activities) and diet low in fruits and vegetables (less than recommended 5 servings of fruits and vegetables per day).

Results:

For the patients' demographic data as shown in table 1, the majority of our cardiac patients who enrolled on CRP were male (91.5%), Malay (45.1%), attained highest secondary education level (46.3%) and had referral diagnosis of acute coronary syndrome (61%). The prevalence of modifiable CVD risk factors among cardiac patients who were enrolled on CRP in Sarawak Heart Centre from the highest to lowest percentage are shown in table 2.

Conclusion:

This study reported a high prevalence of modifiable CVD risk factors among cardiac patients who were enrolled on CRP in Sarawak Heart Centre with top three highest prevalent modifiable CVD risk factors being physical inactivity, diet low in fruits and vegetables consumption and overweight or obesity which can be emphasised and addressed during our CRP for effective secondary cardiac prevention.