COURSE

: MSH 16TH ANNUAL CONGRESS 2019

DATE

: 18TH-20TH JANUARY 2019

VENUE

: SHANGRI-LA HOTEL, KUALA LUMPUR

PREPARED BY: DR. NOR SHAFIKAH DIANA BINTI ISKANDAR

## SUMMARY OF THE COURSE:

- The prevalence of hypertension in Malaysians aged 18 years and above was 35.3% in 2015, a slight increase from 33.6% in 2011. Hypertension is a silent disease, in 2015, for every two diagnosed patients in Malaysia there are 3 undiagnosed patients.
- Untreated or sub-optimally controlled hypertension leads to increased cardiovascular, cerebrovascular and renal morbidity/ mortality and overall mortality.
- 3. BP target: <140/90mmHg for all (except elderly >80 years old or frail elderly >65 years old). Younger patient, high risk of CVD <130/80 mmHg. BP target for diabetics : <140/80mmHg
- 4. Home BP measurements has been shown to be a better predictor of cardiovascular morbidity and mortality than office BP measurements. Thus, patients need to be taught on usage of home BP measurement to attain better control of hypertension.
- Resistant hypertension is elevated ambulatory BP after exclusion of secondary hypertension in patient who are fully adherent to treatment with antihypertensive drug. It increased risks of adverse health outcomes, including cardiovascular and renal events and all-cause mortality.
- Ambulatory BP monitoring is gold standard for diagnosing resistant hypertension, enabling the identification of patient with isolated nocturnal hypertension, sustained hypertension or white coat hypertension
- 7. For isolated systolic blood pressure, it responds best to diuretics and calcium channel blockers and the outcome improved by ACE inhibitors. Overall the lower the SBP the better the outcome.
- 8. Meta-analyses of large available data from RCTs confirm that major antihypertensive drug classes, that is diuretic, ACE inhibitors, calcium antagonist and beta blockers do not differ significantly on their overall ability to reduce blood pressure in hypertension.
- Abnormal high blood pressure causes LV remodelling and fibrosis leading to LV dysfunction and LV failure. The pathophysiology of hypertensive heart disease(HHD) starts from prehypertension. Thus lower target BP can be useful in preventing hypertensive heart disease and heart failure.
- 10. Diuretics and ARBs may be better choice than CCBs, ACEIs, BBs, and Alpha Blockers in HHD.
- 11. In Asians, diuretic-CCB combination may be more efficacious in reducing the risk of cardiovascular events.

COURSE : MSH 16™ ANNUAL CONGRESS 2019

: 18TH-20TH JANUARY 2019 DATE

: SHANGRI-LA HOTEL, KUALA LUMPUR VENUE

PREPARED BY: DR. SITI NOOR AZLIDAH BINTI ALI

## SUMMARY OF THE COURSE:

- 1) Hypertension results from an interaction between diet and lifestyle with the systems that control blood pressure of which the most are the sympathetic nervous system and renin angiotensin aldosterone system.
- 2) BP target: <140/90mmHg for all (except elderly >80 years old or frail elderly >65 years old)
- 3) BP target for diabetics : <140/80mmHg
- 4) BP target for previous lacunar strokes, IHD, LVH and proteinuria >1g/day: <130/80mmHg.
- 5) Home BP measurements has been shown to be a better predictor of cardiovascular morbidity and mortality than office BP measurements. Thus, patients need to be taught on usage of home BP measurement to attain better control of hypertension.
- 6) Elevated systolic BP more closely related to outcome and prognosis in the older age group than elevated diastolic BP. But in the young age group, the diastolic BP may be more important and is more closely associated with future outcome than systolic BP.
- 7) In the young, elevated diastolic BP in the absence of a high systolic BP should not be ignored as it is a powerful antecedent of future hypertension and morbidity.
- 8) For isolated systolic blood pressure, it responds best to diuretics and calcium channel blockers and the outcome improved by ACE inhibitors. Overall the lower the SBP the better the outcome.
- 9) Meta-analyses of large available data from RCTs confirm that major antihypertensive drug classes, that is diuretic, ACE inhibitors, calcium antagonist and beta blockers do not differ significantly on their overall ability to reduce blood pressure in hypertension.
- 10) Resistant hypertension is an elevated ambulatory BP after exclusion of secondary hypertension in patients who are fully adherent to treatment with antihypertensive drugs. It increased risks of adverse health outcomes, including cardiovascular and renal events and all-cause mortality.
- 11) Ambulatory BP monitoring is the gold standard for diagnosis of resistant hypertension.
- 12) Abnormal high blood pressure causes LV remodelling and fibrosis leading to LV dysfunction and LV failure. The pathophysiology of hypertensive heart disease(HHD) starts from prehypertension. Thus lower target BP can be useful in preventing hypertensive heart disease. and heart failure.
- 13) Diuretics and ARBs may be better choice than CCBs, ACEIs, BBs, and Alpha Blockers in HHD.
- 14) In Asians, diuretic-CCB combination may be more efficacious in reducing the risk of cardiovascular events.
- 15) Hypertension is a major risk factor for ischaemic stroke.
- 16) Stroke prevention can be divided into primary and secondary. Risk factor management is part of primary prevention which includes physical activity, blood pressure control, smoking cessation, diabetes control and lipid reduction. Secondary prevention includes medical(antiplatelets and surgical treatments.

- 17) For intracranial haemorrhage, SBP 150-220mmHg, lowering of SBP to 140mmHg is safe and can be effective for improving functional outcome.
- 18) For intracranial haemorrhage patients presenting with SBP>220mmHg,it maybe reasonable to consider aggressive reduction of blood pressure.
- 19) But management of blood pressure in Acute Ischemic Stroke will be different. It should be delayed for several days to 2 weeks. Unless SBP>220mmHg, DBP >120mmHg or end organ involvement. Target BP reduction 10-20% from baseline BP over 24hours. Existing antihypertension medications deferred until enteral access available and medically or neurologically stable.
- 20) Medical practitioners must aware of hypertensive emergency and urgency and treat accordingly.
- 21) An elevated blood cholesterol especially LDL-C, is an important risk factor for Cardiovascular Disease(CVD).
- 22) Hypertensive kidney disease is a complex, multifactorial disease process. Genetics, race, economic status, diet & lifestyle, the timing of diagnosis and treatment affects its natural history. Patients in whom nephropathy develops due to hypertension are more likely to die of cardiovascular disease than ESRD. Thus management of patients with hypertensive kidney disease must therefore also include attention to cardiovascular risk reduction.
- 23) System failure: poor awareness among public and patients. Advice patient to have regular BP check-up at home/ clinics and educate them about hypertension and diet(salt restriction), physical activity and adherence to medications. For prevention is recommended for screening programs to publics.

## DR SOE MIN HTET @ HAJI MOHAMED RAFEE MSH16<sup>TH</sup> ANNUAL CONGRESS 2019 19 & 20 JAN 2019, SHANGRI-LA HOTEL, KULA LUMPUR

- Got Malaysia Hypertension new guidelines
- Start an ACEI or low cost angiotensin II receptor antagonist or patient was not suitable with that, can start a low dose thiazide-type diuretic or calcium channel blocker who are younger than 55 years of age
- A Beta Blocker can be considered for initial treatment for
  - 1. Younger people who cannot use or tolerate e ACE inhibitor and ARB
  - 2. Women who might become pregnant or are planning a pregnancy
  - People with evidence of increased sympathetic drive, such as sweating or palpation symptom.
- How to adjust our treatments by Malaysia CPG guidelines vs. international
- Knowing the transforming the health system to address NCDs
- Tele-health development in Malaysia
- Good way to use health apps