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Guidelines

2015 Guidelines of the Taiwan Society of Cardiology and the Taiwan Hypertension Society for the Management of Hypertension

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Abstract

It has been almost 5 years since the publication of the 2010 hypertension guidelines of the Taiwan Society of Cardiology (TSOC). There is new evidence regarding the management of hypertension, including randomized controlled trials, non-randomized trials, post-hoc analyses, subgroup analyses, retrospective studies, cohort studies, and registries. More recently, the European Society of Hypertension (ESH) and the European Society of Cardiology (ESC) published joint hypertension guidelines in 2013. The panel members who were appointed to the Eighth Joint National Committee (JNC) also published the 2014 JNC report. Blood pressure (BP) targets have been changed; in particular, such targets

Conflicts of interest: Information related to "Conflict of interest", "Task Force for the 2015 Guidelines of the Taiwan Society of Cardiology and the Taiwan Hypertension Society for the Management of Hypertension", "Advisory Board Members for the 2015 Guidelines of the Taiwan Society of Cardiology and the Taiwan Hypertension Society for the Management of Hypertension" can be seen in Appendix section.

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have been loosened in high risk patients. The Executive Board members of TSOC and the Taiwan Hypertension Society (THS) aimed to review updated information about the management of hypertension to publish an updated hypertension guideline in Taiwan.

We recognized that hypertension is the most important risk factor for global disease burden. Management of hypertension is especially important in Asia where the prevalence rate grows faster than other parts of the world. In most countries in East Asia, stroke surpassed coronary heart disease (CHD) in causing premature death. A diagnostic algorithm was proposed, emphasizing the importance of home BP monitoring and ambulatory BP monitoring for better detection of night time hypertension, early morning hypertension, white-coat hypertension, and masked hypertension. We disagreed with the ESH/ESH joint hypertension guidelines suggestion to loosen BP targets to <140/90 mmHg for all patients. We strongly disagree with the suggestion by the 2014 JNC report to raise the BP target to <150/90 mmHg for patients between 60-80 years of age. For patients with diabetes, CHD, chronic kidney disease who have proteinuria, and those who are receiving antithrombotic therapy for stroke prevention, we propose BP targets of <130/80 mmHg in our guidelines. BP targets are <140/90 mmHg for all other patient groups, except for patients ≥80 years of age in whom a BP target of <150/90 mmHg would be optimal.

For the management of hypertension, we proposed a treatment algorithm, starting with life style modification (LSM) including **S-ABCDE** (**S**odium restriction, **A**lcohol limitation, **B**ody weight reduction, **C**igarette smoke cessation, **D**iet adaptation, and **E**xercise adoption). We emphasized a low-salt strategy instead of a no-salt strategy, and that excessively aggressive sodium restriction to <2.0 gram/day may be harmful. When drug therapy is considered, a strategy called "**PROCEED**" was suggested (**P**revious experience, **R**isk factors, **O**rgan damage, **C**ontraindications or unfavorable conditions, **E**xpert's or doctor's judgment, **E**xpenses or cost, and **D**elivery and compliance issue). To predict drug effects in lowering BP, we proposed the "**Rule of 10**" and "**Rule of 5**". With a standard dose of any one of the 5 major classes of anti-hypertensive agents, one can anticipate approximately a 10-mmHg decrease in systolic BP (SBP) (Rule of 10) and a 5-mmHg decrease in diastolic BP (DBP) (Rule of 5). When doses of the same drug are doubled, there is only a 2-mmHg incremental decrease in SBP and a 1-mmHg incremental decrease in DBP. Preferably, when 2 drugs with different mechanisms are to be taken together, the decrease in BP is the sum of the decrease of the individual agents (approximately 20 mmHg in SBP and 10 mmHg in DBP). Early combination therapy, especially single-pill combination (SPC), is recommended.

When patient's initial treatment cannot get BP to targeted goals, we have proposed an adjustment algorithm, "**AT GOALs**" (**A**dherence, **T**iming of administration, **G**reater doses, **O**ther classes of drugs, **A**lternative combination or SPC, and **L**SM + **L**aboratory tests). Treatment of hypertension in special conditions, including treatment of resistant hypertension, hypertension in women, and perioperative management of hypertension, were also mentioned.

The TSOC/THS hypertension guidelines provide the most updated information available in the management of hypertension. The guidelines are not mandatory, and members of the task force fully realize that treatment of hypertension should be individualized to address each patient's circumstances. Ultimately, the decision of the physician decision remains of the utmost importance in hypertension management.

Keywords: Asia; guidelines; hypertension; Taiwan

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