

South African hypertension society guidelines 2006



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The South African Hypertension Society (SAHS) Guideline 2006¹ will, it is anticipated, fulfil an educational role and also provide clinical direction to health care professionals involved in the management of hypertension. This most recent hypertension guideline which was published in April as a supplement to the South African Medical Journal, is the third and most comprehensive version produced by the SAHS. It has incorporated information derived from the most recent studies related to hypertension and is evidence based. Whilst significant sections of the SAHS guidelines have been adapted from similar documents compiled by European and American experts, the local experts have strived to compile a document which is relevant to and implementable in our own health care settings.

The SAHS guideline 2006, is the first joint effort between the Department of Health and the SAHS. This would ensure that there is an agreed upon, uniform, national approach in the treatment of hypertension. This will hopefully reduce the impact of hypertension and cardiovascular disease in Southern Africa.

Compared to previous two versions, the SAHS Guideline 2006 is more comprehensive and includes new recommendations based on more recent studies. It embraces major clinical issues relating to blood pressure (BP) measurement, classification of hypertension, cardiovascular disease risk stratification and the management of hypertension.

Office BP measurement is still regarded as the essential method of measuring the BP and making subsequent decisions for commencing antihypertensive therapy. The mercury sphygmomanometer has been the subject of increasing criticism because it contains mercury which is inert and does not degrade. The mercury from such instruments is a major environmental hazard when it is discarded. Nevertheless, this instrument remains the acceptable device because of its common usage. There is now greater support for replacing these devices with validated automated oscillometric devices. The importance of the correct method for BP measurement and the use of appropriate sized cuffs when measuring the BP is emphasized. Self measurement of BP and ambulatory BP measurements are now also

accepted as important in the evaluation of some hypertensive patients. The major indications for either of these methods of BP assessment are for the exclusion of suspected white-coat hypertension and the confirmation of refractory hypertension.

The evaluation of cardiovascular risk is regarded as fundamental to the decision of when and how to treat hypertension. By considering simultaneously the stage of hypertension and the presence of other cardiovascular risk factors, target organ damage and associated clinical conditions the clinician is able to stratify patients according to the degree of cardiovascular risk. The risk of a hypertensive patient experiencing a cardiovascular event within 10 years ranges from less than 15% with low added risk to greater than 30% with very high added risk.² The need for antihypertensive therapy and the potential benefit of treatment is greatest for patients at high or very high added risk. Drug therapy is commenced early in patients within this risk category. Patients with low added risk are subjected to life style modifica-



tions for 6-12 months and only if the BP remains elevated above 140/90 mm Hg is drug therapy commenced. Whilst the short term absolute risk of a cardiovascular event is low in this case, the life time risk is considerable. Similarly patients at moderate added risk will only be treated with drugs if their BP remains elevated despite life style modifications for 3- 6 months.

In the section relating to anti-hypertensive drugs, the guidelines recommend diuretics, angiotensin converting enzyme inhibitors (ACE-I) and calcium channel blocking agents over beta-blockers as agents of choice for patients without compelling indications for specific agents. Beta-blockers have traditionally been regarded as a first line agent for hypertension because

they were thought to have beneficial effect on cardiovascular events. More recent evidence based on data derived from meta-analysis indicate that beta-blockers are not as protective against stroke and myocardial infarction as other agents.³ Furthermore, it has been observed from a number of studies that beta-blockers when administered with a diuretic, increase the risk of developing new onset diabetes mellitus.⁴ These data are derived from studies in which the older generation of beta-blockers were used and do not necessarily apply to some of the newer beta-blocking agents. These newer beta-blockers however, do not have long term morbidity and mortality data.

The best way to prevent complications of hypertension is to reduce the BP to optimal levels. There are however, circumstances where in addition to lowering the BP, specific agents may have an additional protective effect. Compelling indications for agents which block the renin-angiotensin system include heart failure, diabetes mellitus, chronic kidney disease, left-ventricular hypertrophy and post stroke. The ACE-I may be replaced by an angiotensin receptor blocker if the patient is intolerant of the ACE-I. Compelling indications for a beta blocker are angina, post myocardial infarction and heart failure. Calcium antagonists are suitable for isolated systolic hypertension and angina.

The target BP has been lowered in all recent guidelines. There is general agreement that in the uncomplicated hypertensive patient, the physician should aim at lowering the BP to below 140/90 mm Hg. In the high risk patients such as those with diabetes mellitus, renal disease and heart failure, a lower BP of 130/80mm Hg is the goal.

The SAHS guideline 2006 should be viewed as an aid in clinical decision making. It is by no means prescriptive and in many instances the clinician will still have to rely on sound clinical judgment in making a therapeutic decision.

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