President's Message

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HYPERTENSION – DIFFICULT QUESTIONS

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Advances in Hypertension (HT) research have answered many clinical questions; however, there are a number of questions where answer is not clear. These include: 1. When to initiate drug therapy? 2. What is the drug of first choice? What to do if there is inadequate response? What is the exact role of new drugs?

When to initiate drug therapy for HT? is possibly the most critical question, because once you initiate drug therapy, it will continue indefinitely for the rest of patient life.

An ideal drug besides being effective in lowering BP should have no adverse effects, administered once daily, affordable and address metabolic risk factors associated with HT, namely such as impaired glucose tolerance, dyslipidemia and gout.

The diagnosis of HT does not depend on patient's symptoms or signs but on numbers. Exceeding a specific threshold will diagnose HT. Therefore BP should be checked accurately, taking all precautions to avoid over or under diagnosis. Furthermore, the diagnosis of HT depends upon repeated measurements. BP is liable to fluctuations and variability over the 24-hr period. Therefore, BP should be checked several times over a period of days or weeks before making the diagnosis.

Patient should be sitting relaxed, bladder empty and does not talk during measurements. If BP is elevated, exceeding 140/90 mmHg on

repeated measurements, careful search for target organ damage is needed namely ECG for left ventricular hypertrophy or ischemic changes. Testing for blood sugar, urea, creatinine, lipid profile and urinary albumin is required. Optic fundus examination may be required in severe cases or when there are evidence of target organ damage. Unless there is an emergency or evidence of target organ damage or severe elevation of BP (> 180/120 mmHg), advice the patient regarding life style modification namely limiting salt intake, losing weight if obese, exercising, avoiding stress, stopping smoking and follow-up for repeated BP measurements. If after 4–8 weeks BP remains elevated (> 140/90 mmHg), pharmacologic therapy should be considered.

The drug of first choice depends upon the degree of BP elevation, patient age, presence of other CV risk factors or metabolic disorders.

In young patients (age less than 40 years), after excluding a possible cause for HT, particularly in presence of tachycardia, beta-adrenergic blockers are the drugs of first choice. In the elderly or obese a thiazide diuretic is recommended. In presence of diabetes or renal disease, RAS blockers are the first choice.

Patient should be advised that treatment will continue indefinitely and BP should be checked at regular intervals, 3 to 6 months together with life style modification.

In absence of a satisfactory response to drug therapy, physician should ensure patient compliance with drugs and following a healthy lifestyle. Failure to achieve an optimal BP control i.e. < 140/90 mmHg and < 130/80 mmHg in diabetic patients or presence of target organ damage, more aggressive diuretic therapy may be needed. A search for a possible cause of HT is rarely required except in exceptional cases such as HT in the young and presence of symptoms or metabolic abnormalities and in patients with resistant HT.