

PRESIDENT'S MESSAGE

UNMET NEEDS IN HYPERTENSION THERAPY

In spite of the advances made in the treatment of high blood pressure and the development of safe and effective therapy, the management of hypertension is still not optimal. Hypertension control rates in all countries are low and vary from 2 to 30%. Many individuals worldwide suffer and die from hypertensive complications, namely stroke, heart attack, renal and heart failure. Hypertension is responsible of about 60% of strokes and 50% of coronary events. Therefore, it is important to consider what is missing in the management of high blood pressure and what are the unmet needs?

1. Improve blood pressure control: failure to achieve adequate blood pressure control is a common and serious problem. Causes of the failure are related to the patient, doctor and blood pressure drugs. Lack of patient's compliance and interruption of drug therapy is common. In a survey done among Egyptian patients with high blood pressure, more than three quarters discontinued their medications within one year. The reasons included side effects, drug cost, misunderstanding, silent nature of the disease, doctors advice and complexity of the therapeutic program e.g. too many drugs and frequent dosing. Many doctors fail to treat the patients to target blood pressure because of inertia, fear of the J curve, ignorance about drug dosage and frequency of administration, lack of adequate diuresis, use of pressor medications and failure to advice their patients regarding lifestyle namely limiting salt intake, dietary measures and control of obesity. The available antihypertensive drugs, in spite of their increasing number-now we have more than 75 antihypertensive drugs in 9 different pharmacologic groups- have their own limitations. The heterogeneous nature of hypertension makes it almost impossible to find a drug that can lower blood pressure in all patients. Furthermore, tolerance to antihypertensive therapy can develop secondary to activation of a number of compensatory pressor mechanisms such as activation of RAS, salt and water retention and adrenergic stimulation.

2. Address Other CV Risk Factors: in spite of adequate blood pressure control, morbidity and mortality rates are still higher in hypertensive than normotensive individuals. One reason is the fact that high blood pressure is associated in the majority of patients with other CV risk factors, namely diabetes, impaired glucose tolerance, dyslipidemia, obesity and systemic proinflammatory state. These risk factors if not addressed, patients will continue to be at increased risk of future cardiovascular and renal events despite normalization of blood pressure.

3. Prevention or correction of hypertensive target organ damage: therapy specially when initiated late may fail to completely correct hypertension residual damage which involves the CV systems (LVH, AF, HF, coronary events), the kidneys (proteinuria and renal failure) and blood vessels (increased arterial stiffness and atherosclerotic changes).

4. Avoid antihypertensive therapy collateral damage: antihypertensive drugs are not free from side effects which vary from minimal inconvenience such as ankle edema to important metabolic and electrolyte changes. The latter include impaired glucose tolerance, increased plasma triglycerides, hyperurecemia, hyper/hypokalemia, deterioration in renal function, sexual dysfunction, allergic reactions, cough, hypotension and syncope.

5. Rational Therapeutic Approach: At this stage of knowledge drug therapy of hypertension is in most instances empirical, based upon trial and error. The complexity of the mechanisms leading to elevation of blood pressure and lack of understanding of the responsible genetic and environmental factors, makes it difficult to identify a rational therapy targeting the pressor mechanisms. In many patients, more than one factor is involved. These include activation of the RAS, adrenergic system, salt and water retention and arterial stiffness. Responses to drug therapy, are influenced by patient's age, skin color, race, body mass index, degree of sympathetic stimulation, presence of TOD or associate atherosclerotic cardiovascular and renal disease.

New antihypertensive drugs are required to address the previous unmet needs. We need well-tolerated, effective drugs, free from side effects, with benefits beyond blood pressure lowering that can address other CV risk factors and prevent organ damage. Furthermore, we need better physician and patient education.

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