PROF-671

HYPERTENSION;
UPDATE

DR. MUHAMMAD RASHID CH, MBBS, MRCP(UK) FRCP (Edin)
Associate Professor of Cardiology
Sh Zayad Postgraduate Medical Institute, Lahore

Hypertension is insidious in onset, usually asymptomatic and readily modifiable disease, The prevalence of hypertension increases with age, as do its complications.. The importance of hypertension is primary (without any cause) in 90% cases. 5% is due to renal disease and remaining 5% had endocrinal and miscellaneous causes.. The WHO/ISH definition of hypertension. Includes systolic and diastolic BP fall in different category the higher one counts There has been long debate on the importance of systolic and diastolic blood pressure.

Presently consensus in that both the systolic[2,3] and diastolic[4,5] BP control reduce cardiovascular complicationd[6] . There is evidence that is the pulse pressure [Systolic-diastolic BP] that dictates the risk of hypertension[7,8]. Isolated systolic hypertension which is common older eople9 (systolic>=160mm Hg. Diastolic <90mmHg) is also equally important as regards end damage. Almost half the myocardial infraction and who third of strokes are caused by hypertension. In addition angina, left ventricular hypertrophy. Left ventricular dysfunction, congestive heart failure, dementia, renal disease, proteinuria, peripheral vascular disease, aortic aneurysm, retinopathy, accelerated hypertension and hypertensive encephlopathy are some of the other serious disease caused by hypertension.

The main determinants of risk and evaluation of a patient of hypertension consist., of level of blood pressure, severity of hypertension, age , presence of other cardiovascular risk factors, organ damage and associated clinical disease. The WHO/ ISH has issued guidelines for stratification of risk to quantify prognosis.

In mild hypertension (SBP 140-159or DBP90-99] no risk factors–low risk, 1-2 risk factors–medium risk, 1-2 risk factors –medium risk, 30r more risk factors TOD or diabetes –high risk[10.]

The management of hypertension consists of life style modification and pharmacological therapy The Joint National committee on prevention, detection, evaluation and treatment of high Blood pressure (JNC-VI) has advised appropriate dietary and life habit measure. The (JN-VI) recommends reduction in alcohol intake as excess alcohol exacerbates hypertension and aerobic exercise of 30-45 minutes, most days of the week to reduce weight[11] and to increase HDL level. Weight loss also helps in the control of diabetes and of high cholestrol[12] The (JN-VI) advises reduced salt (sodium chloride $\leq$ 6grams / day) to reduce the BP. This reduction can be achieved by avoiding processed food and table salt. An increase in vegetable intake, reduction in saturated fat intake and stopping of smoking is also recommended.

Angiotensin converting enzyme (ACE) inhibitors have to

be considered as fault line drugs due to their efficacy in myocardial infraction remodeling[13] in nephropathy[14,16] and in the presence of heart failure. Diuretics are cheap and useful in congestive heart failure. Beta blockers have stood at top in test of time in treatment of hypertension especially when it is associated with ischemic heart disease[17] The safety, tolerability , efficacy and low cost have made this group of drugs ,the most widely used all over the world. Calcium channel blockers .especially long acting dihydropyridine derivatives, are very effective antihypertensives and are extensively used .Angiotensin receptor blockers are useful in patients who can not take ACE inhibitors due to cough and other side effects[18"20] They have also proved useful in proteinuria[21] Aldosterone receptors blockers, likeeplerenone, are also making their way in the market with good promise. In case of accelerated hypertension, hypertensive encephlopathy, aortic dissection, eclempsia, pre-eclampsia and pulmonary edema secondary to hypertension intravenous drugs are required in intensive care unit

The aim of the treatment is to reduce BP to 140/90mm Hg. In case of diabetes mellitus Hypertension Optimal Treatment(HOT)[22] and UK prospective Diabetes study group 38 Study[23] have validated the target BP as 130 /80mmHg.. In case of accelerated hypertension and encephlopathy sudden reduction of BP has to be avoided because auto-regulation of cerebral blood flow may be impaired

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