

HYPERLIPIDEMIA & HYPERTENSION UPDATE

2013 European Guidelines for Hypertension Management

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In June 2013 the European Society of Hypertension (ESH) / European Society of Cardiology (ESC) published new guidelines for the management of hypertension. These are the first European Guidelines for hypertension developed by applying a strict “evidence-based” approach using a grading system for the level of evidence and the strength of recommendations. Several recommendations in the new guidelines deserve careful consideration because they change the way that hypertension is managed in routine clinical practice.

The assessment of the total cardiovascular risk is recommended for deciding when to initiate treatment in subjects with confirmed hypertension defined as elevated blood pressure >140/90 mmHg (systolic/diastolic). Thus, hypertensive subjects with high or very high total cardiovascular risk should promptly start antihypertensive drug treatment once diagnosis is confirmed and the results of the initial evaluation are available. On the other hand, hypertensive subjects with lower total cardiovascular risk are advised to apply lifestyle modification measures and drug treatment should be initiated after several months if blood pressure remains elevated. Treatment of high-normal blood pressure (systolic 130-140 mmHg and/or diastolic 80-90 mmHg) is not recommended anymore, irrespective of the total cardiovascular risk (low, moderate or high).

The conventional measurement of blood pressure at the doctor’s office remains as the main screening tool for hypertension detection. However, increased use and specific indications for ambulatory and home blood pressure monitoring are recommended, and directions provided on when to suspect and investigate for white coat and masked hypertension. White coat hypertension should be suspected in all subjects with grade 1 hypertension, and those with high office blood pressure, no organ damage and low total cardiovascular risk. On the other hand, masked hypertension should be suspected in all subjects with high-normal office blood pressure, and those with normal office blood pressure and asymptomatic organ damage or high total cardiovascular risk. White coat hypertension in subjects at low total cardiovascular risk should be confirmed with repeated office and out-of-office blood pressure measurements (self-home or ambulatory blood pressure monitoring) and then regularly followed once or twice per year while applying non-pharmacological measures, because of the potential to develop sustained hypertension in the following years that will require drug treatment. On the other hand, masked hypertension requires confirmation with repeated measurements and then should be treated because it carries similar cardiovascular risk as uncontrolled sustained hypertension.

Non-pharmacological measures for blood pressure reduction, as well as the choice of drugs for treatment initiation (thiazide diuretics, beta-blockers, calcium channel blockers, angiotensin converting enzyme inhibitors, angiotensin receptor blockers) and the use of combinations remain unchanged. The choice of drugs should be tailored

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according to the individual's specific indications and contraindications to the antihypertensive drug classes. Other second line drugs might be used when combination of the first line drugs is not effective or not well tolerated. Treatment might be initiated with combination of two drugs in subjects with high total cardiovascular risk and blood pressure levels exceeding the hypertension threshold by 20 mmHg systolic and/or 10 mmHg diastolic or more.

The recommended systolic blood pressure goal with treatment now is <140 mmHg for all subjects with hypertension, irrespective of their cardiovascular risk (low, moderate, high, or very high risk hypertensives, e.g. with diabetes, coronary heart disease, stroke, transient ischemic attack, chronic kidney disease). In regards to the diastolic blood pressure the recommended goal is <90 mmHg for all subjects with hypertension, apart from the diabetics in whom it is <85 mmHg.

In the elderly hypertensives, drug treatment should be initiated at systolic blood pressure levels ≥ 140 mmHg in those aged >65 years and ≥ 160 mmHg in those >80 years. The treatment goal should be <140 mmHg in fit elderly aged <80 years and to higher levels in fragile subjects. In those aged >80 years in good physical and mental condition the systolic blood pressure goal should be 140-150 mmHg.

Shortly after the European guidelines for hypertension were published, the American Society of Hypertension together with the International Society of Hypertension also published a clinical practice guidelines document for the management of hypertension and the US Joint National Committee published its 8th report for the management of high blood pressure in adults (JNC 8). There are some interesting

differences among these documents in their recommendations and philosophy for hypertension management. However, their detailed comparison is rather a matter of intellectual exercise for experts and with little clinical relevance for practicing physicians. In essence, there is considerable agreement rather than disagreement among these guidelines. Thus, the key issue is how to disseminate and implement these guidelines in different healthcare systems and in a cost effective manner, aiming to improve the poor hypertension control rates in the general population and thereby reduce the incidence of cardiovascular disease.

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