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Diagnosis of hypertension

At the session in Barcelona, Professor Krzysztof Narkiewicz from Gdansk made the first presentation and declared that *"maybe you expected an earthquake but we decided to keep the classification and definition of hypertension from 2013"*. Hence, hypertension is still defined as an office blood pressure (BP) of 140/90 mmHg or above. The definitions of grade 1-3 hypertension are also unchanged, and so are the definitions of normal ambulatory BP and normal home BP. Hence, the new European guidelines do *not* follow the 2017 ACC/AHA definition of hypertension (BP 130/80 mm Hg or above) which is wise!

When to treat

In the new European guidelines, immediate pharmacological treatment is recommended to all people with a BP of 160/100 mmHg or higher. In those with grade 1 hypertension (140-159/90-99 mm Hg) with low to moderate risk, the effects of life-style intervention should be evaluated before drug treatment as in previous guidelines. In patients with coronary artery disease, treatment may be considered when BP is in the 'high normal' range i.e. 130-139/85-89 mm Hg. In patients with a systolic BP (SBP) of 150 mmHg and above, anti-hypertensive therapy is recommended to start with a two-drug combination, unless the patient is frail or elderly.

The new guidelines give us rather complicated recommendations on when drug treatment should be started and how intensive the treatment should be. For most patients, we have three different BPs to keep in mind for each group of patients: (1) There is one BP threshold for initiating treatment and (2) another for the BP goal. In addition, there is (3) one BP level we should not go below.

I think that in these new guidelines, the BP target is often quite narrow, in relation to the normal BP variability. For example, in a large population with hypertension, without complicating organ damage



aged 18-65 years, you should start treatment if BP is 140/90 mm Hg or above and aim at a SBP of 130 mmHg or lower, but not below 120 mmHg. In addition, the diastolic target for this group of patients is 70-79 mmHg. Thus, the BP target is 120-129/70-79 mmHg. Needless to say, it may not be easy to tune in the BP within such a narrow range. A further problem is that you do not know what your patient's achieved blood pressure will be one month after the latest change in therapy. With similar evidence available, it would have been easier to have only one target: e.g. if BP is above xxx mmHg, start or intensify therapy; if BP is below xxx mmHg do not intensify therapy. Both, of course, to be modified if there are side effects.

In Barcelona, Professor Mancia from Milan told us that the results of the SPRINT trial had not had any major impact on the European guidelines, which is reassuring (!) However, in these new European guidelines the treatment targets are, in fact, lower for many groups of patients than in they were in earlier guidelines and this can be debated. E.g. the new treatment goal for patients above 80 is now a BP of 130-139/70-79 mmHg. Also, for patients with diabetes the new BP target of 120-130 mmHg is lower than the latest recommendation from American Diabetes Association (ADA)¹. Finally, to me, the low BP target and the benefit of treatment may be questioned in low risk patients².

Continued overleaf

How to treat

In the European hypertension guidelines from 2013 beta-blockers were kept as first-line therapy, whereas in most other recommendations they were not. Now, this has finally changed. ARBs, ACE-inhibitors, diuretics and calcium channel blockers are now recommended as first line drugs, in most patients. Beta-blockers are only recommended if there are special indications for them e.g. heart failure, post-MI etc.

Device based therapy

Finally, the new European guidelines give a clear message on the use of device-based therapies. They are not recommended - apart from in clinical studies - until further evidence regarding their safety and efficacy is available. This is a clear and scientifically sound statement which, I am sure, will stimulate further technical developments and clinical trials.

I look forward to reading the full text of these new and comprehensive European recommendations and the evidence behind them in late August.

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REFERENCES

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