

How to initiate antihypertensive treatment ?

Once arterial hypertension has been confirmed, lifestyle modifications (weight loss, limiting salt intake, increasing exercising) are recommended as a first step of the high blood pressure management.

The choice of a first antihypertensive drug, will not only depend on the blood pressure values but will also be determined by the presence of additional diseases (comorbidities) as well as the presence of other cardiovascular risk factors (diabetes, hypercholesterolemia, renal diseases...)

Several scientific societies involved with high blood pressure management have integrated the concept of the global risk assessment and have elaborated recommendations and scores to help decision making for the treatment of arterial hypertension (cf. ESH et ESC/SSH)

Three antihypertensive drug classes have demonstrated a clear efficacy on blood pressure reduction as well as in the prevention of cardiovascular complications. The three drugs classes are **diuretics** : thiazides (D) and aldosterone antagonists (AA) ; **calcium antagonists** (CA) ; **blockers of the renin-angiotensin system** (B-RAS) : conversion enzyme inhibitors (CEI) and angiotensin II receptor antagonists (ARA). Beta blockers (BB) have demonstrated a lesser effect on stroke prevention.

Side effects are related to the different drug classes and may impose drug class changes. However, side effects do subside upon drug withdrawing.

Choice of the antihypertensive drugs with concomitant conditions:

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| Coronary heart disease | BB, B-RAS, CA |
| Heart failure | B-RAS, D, BB, AA |
| Asthma and COPD | B-RAS, CA, D |
| Dyslipidemia | B-RAS, CA |
| Proteinuria, microalbuminuria, diabetic nephropathy | B-RAS |
| Glucose intolerance | B-RAS, CA |
| Diabetes | B-RAAS, CA, BB |
| Pregnancy | BB, ACA Contraindication for B-RAS & Warning: diuretics |
| Hyperkinetic state, tremor, migraine | BB |