

**PATIENT EDUCATION**  
**CONTENT**  
*Hypertension*

# HYPERTENSION

Hypertension is a medical condition in which the force of blood against the artery walls remains consistently high. Over time, it can damage blood vessels and increase the risk of serious health problems such as heart disease, stroke, and kidney failure. It is often called a “silent killer” because it may not show noticeable symptoms but can lead to severe complications if left untreated.

## DIAGNOSING HYPERTENSION

Episode of hypertensive urgency/emergency

Inpatient AOBP: SBP  $\geq$  180 or dBP  $\geq$  110

Mean awake ABPM: SBP  $\geq$  135 or dBP  $\geq$  85

Mean 24-hr ABPM: SBP  $\geq$  130 or dBP  $\geq$  80

**HYPERTENSION**

### DIAGNOSTIC TOOLS



**AOBP**  
Automated office  
blood pressure  
measurement



**OBPM**  
Office blood  
pressure  
measurement



**HBPM**  
Home blood  
pressure  
measurement

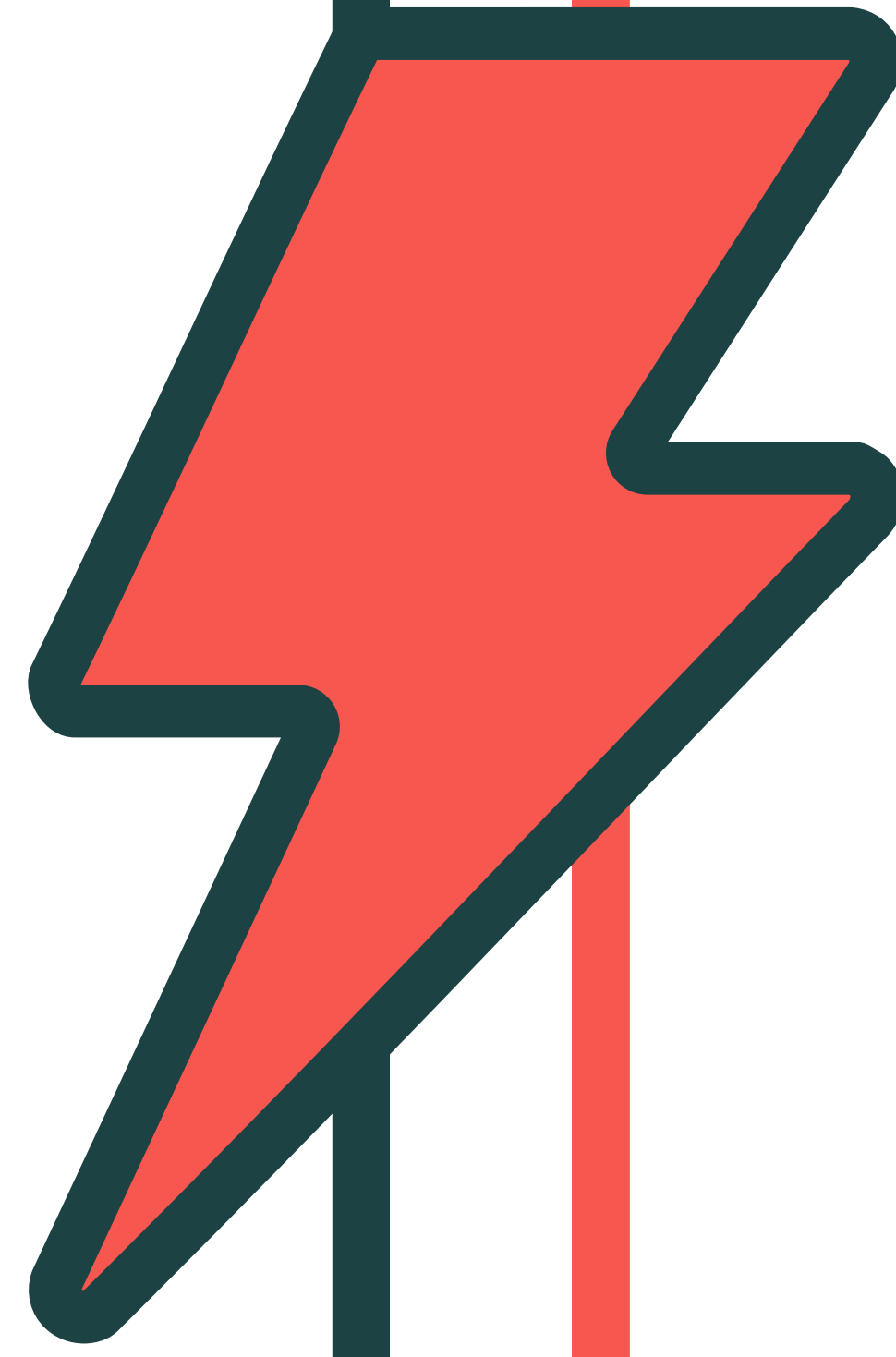


**ABPM**  
Ambulatory blood  
pressure  
monitoring

# BEFORE DIAGNOSING PRIMARY HYPERTENSION, CONSIDER...

## SECONDARY CAUSES OF HYPERTENSION

primary kidney disease  
obstructive sleep apnea  
hyperaldosteronism  
pheochromocytoma Cushing's syndrome  
renal artery stenosis  
coarctation of the aorta  
certain medications



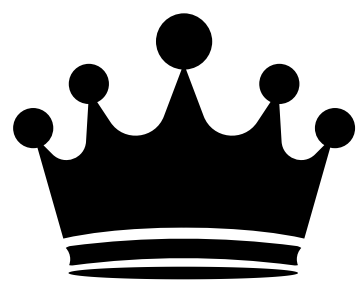
## WHEN TO SUSPECT A SECONDARY CAUSE

hypertension that is severe, treatment-resistant, and/or associated with end-organ damage onset at ages  $\leq 30$  or  $\geq 55$  years

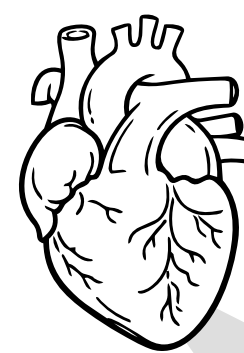
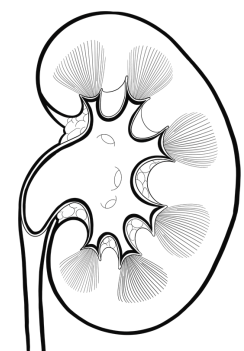
### etiology-specific associations

eg, hypokalemia in hyperaldosteronism,  $\uparrow\uparrow$  Cr post-ACEV/ARB in renal artery stenosis

# TREATMENT



Certain classes are first-line in the setting of specific co-morbidities

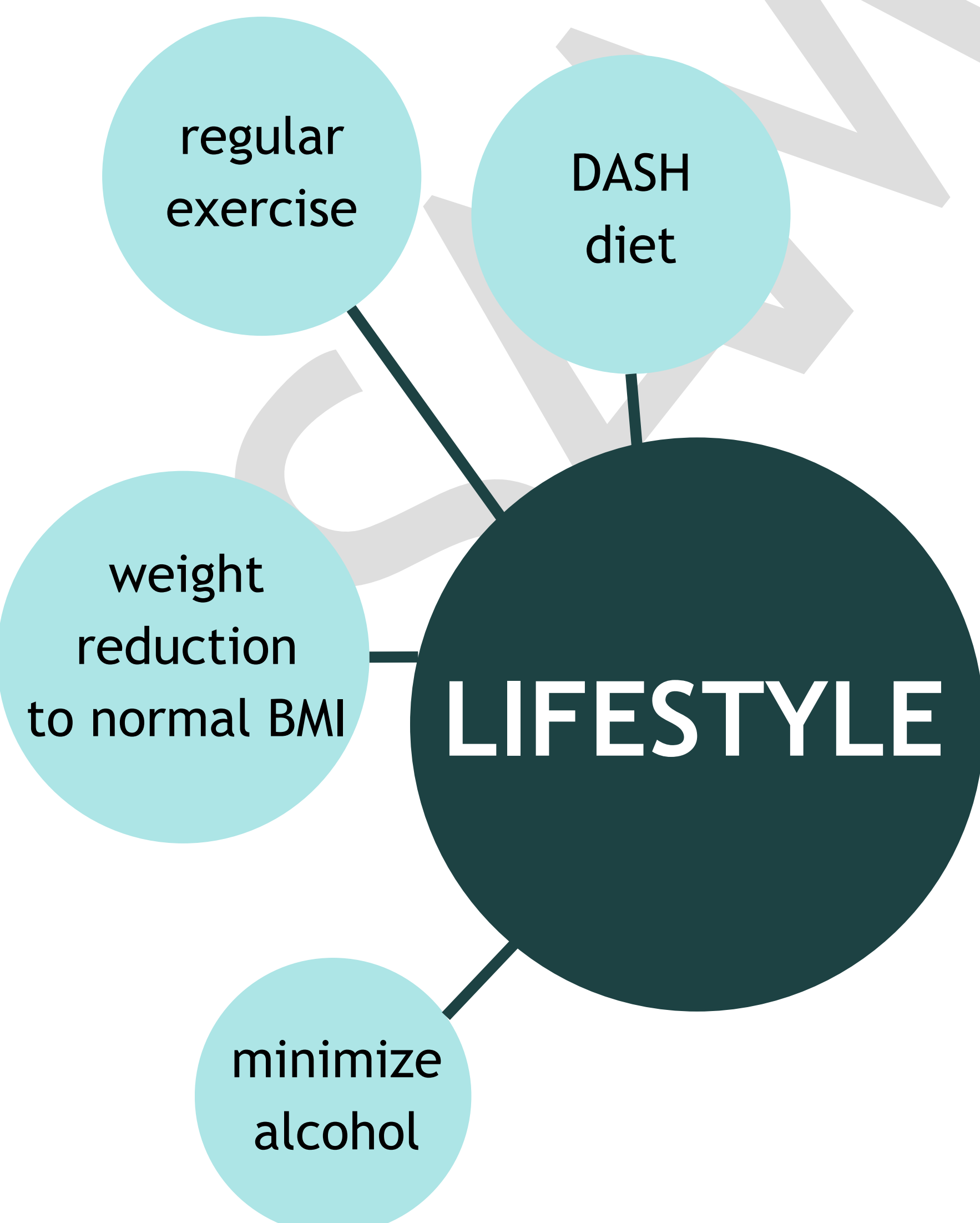


## GOAL

For most patients, target sBP  $< 140$  & dBP  $< 90$

For those with DM, target sBP  $< 130$  & dBP  $< 80$

For select high risk patients, consider target SBP  $< 120$



## PHARMACOLOGIC

class	example
thiazidel-like) diuretics	chlorthalidone
ACE inhibitors	ramipril
ARBs	candesartan
dihydropyridine CCBs	amlodipine
beta blockers	bisoprolol