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Review on concepts of hypertension treatment

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Abstract

The outcome of treatment in elderly hypertensives is examined in six major randomized controlled trials. Thiazide diuretics were first-or second-line drugs in each, and the development of a national database on normative blood pressure levels throughout childhood has contributed to the recognition of elevated blood pressure in children and adolescents. The epidemic of childhood obesity, the risk of developing left ventricular hypertrophy, and evidence of the early.

Keywords: hypertension, Thiazide diuretics, hypertrophy.

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Introduction

Hypertension is another name for high blood pressure. It can lead to severe health complications and increase the risk of heart disease, stroke, and sometimes death. Blood pressure is the force that a person's blood exerts against the walls of their blood vessels [1]. This pressure depends on the resistance of the blood vessels and how hard the heart has to work. Almost half of all adults Trusted Source in the United States have high blood pressure, but many may not know they have it [2].

Hypertension is a primary risk factor for cardiovascular disease, including stroke, heart attack, heart failure, and aneurysm. Managing blood pressure is vital for preserving health and reducing the risk of these dangerous conditions.

Read on to learn why blood pressure can increase, how to monitor it, and ways to keep it within a typical range.

Symptoms [3, 4]

The first symptom of PH is shortness of breath during routine activity, such as climbing stairs. Additional symptoms include:

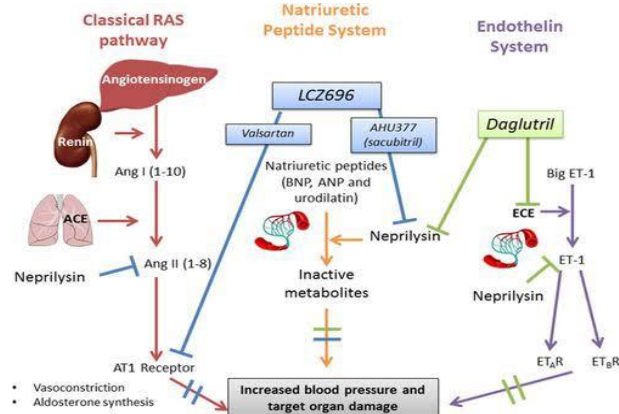
- Tiredness
- Dizziness or fainting spells
- Bluish lips and skin
- Chest pain or pressure
- A racing heartbeat

Not everyone experiences all these symptoms and they can vary in severity. PH can be difficult to diagnose. It is therefore important to provide healthcare providers with a complete medical history and a description of all symptoms so that they can make the right diagnosis.

Treatment of hypertension

Treatment of hypertension it involves in two types

1. Pharmacological treatment
2. Non pharmacological treatment

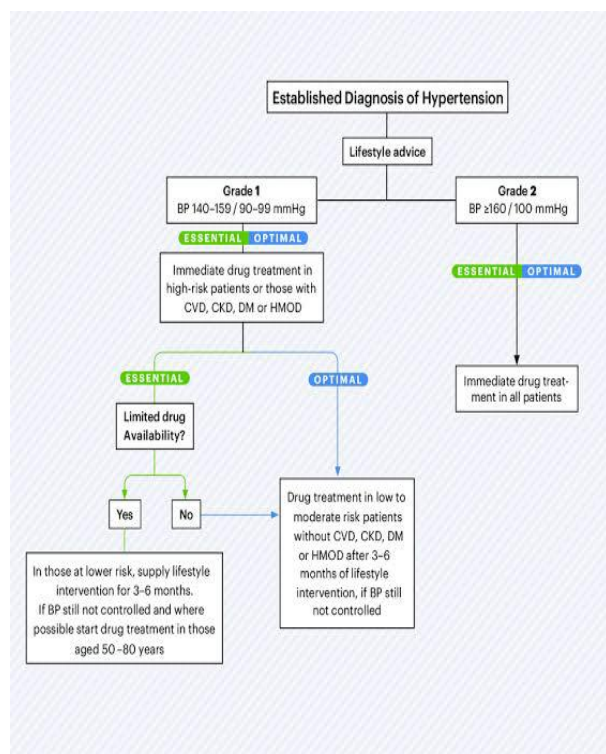


Pharmacological treatment

Pharmacological treatment involves in usage of anti-hypertensive drug

They are mainly classified into

1. Diuretics
2. Renin angiotensin system Inhibitors
3. Sympathetic Inhibitors
4. Calcium channel blockers
5. Vasodilators



Diuretics

Diuretics again can be divided into three categories

1. Thiazides
2. Hydrochlorothiazide
3. Indapamide
4. Highselling
5. Furosemide
6. Pot Sparing
7. Spironolactone
8. Eplerenone
9. Amiloride

Mechanism of action of these group of drugs involves in the As diuretics blocked the absorption of water sodium and potassium at the cortical diluting segment of the distal tubules as an anti-hypertension reduce plasma extracellular fluid volume and peripheral and vascular resistance by direct effect on blood vessel and Involves it reduce BP

RAS Inhibitors

These are sub divided into three groups they are

ACE inhibitors

1. Captopril
2. .Enalapril
3. Lisinopril

Angiotensin receptor blockers

1. Losartan
2. Valsartan
3. Onlesartan

Direct renin Inhibitors

1. Aliskrien

Mechanism of action

An angiotensin II receptor type-AT 1 antagonist that blocks vasoconstrictor and aldosterone secreting effects on angiotensin II.

Inhibiting the binding of angiotensin ii receptor type-AT1 and it cause vasodilators decreases pheriphral resistance and decreases BP.

Sympathetic Inhibitors

They are classified into mainly 4 classes of drugs

Beta Adrenergic Blocker

1. Propanol
2. Metoprolol
3. Atenolol

Alpha + Beta adrenergic blocker

1. Labetalol
2. Carvedilol

Alpha adrenergic blockers

1. Prazosin
2. Terazosin
3. Doxazosin

Central Sympatholytic

1. Clonidine
2. Methyldopa

Calcium channel blockers

They are sub divided into

1. Phenyl Alkylakine
2. Verapamil
3. Benzodiazepine
4. Diltiazem
5. Nifedepine
6. Felodipine
7. Amlodipine

Vasodilators

They are divided into

1. Arteriolar Dilator
2. Hydralazine
3. Minoxidil
4. Diazoxide
5. Arteriolar+ Venodialator
6. Nitropruside sodium

Non Pharmacological treatment

Non pharmacological treatment of involves in

- weight loss
- Limitations alcohol intake
- Increasing aerobics physical activity
- Reducing The Sodium Intake
- Maintaining Deity intake of potassium
- Decreases intake of calcium and magnesium
- Reducing intake of dietary fat and cholesterol
- Reduce smoking

Conclusion

Hypertension is a very important disorder in aged people and is associated with higher risk of cardiovascular morbidity and mortality. The fact of reducing blood pressure values decreases the risk for cardiac death as well as neurological, metabolic, and musculoskeletal system sequelae in aged people.

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