Hypotension and homoeopathic management

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Abstract

Hypotension is a decrease in systemic blood pressure below accepted low values. In general, elderly patients are more prone to non-traumatic, symptomatic hypotensive episodes. Also, more physically active and healthy patients will have lesser resting asymptomatic blood pressures. It is a relatively benign condition that is under-recognized mainly because it is typically asymptomatic. It only becomes a concern once when pumping pressure is not sufficient to perfuse key organs with oxygenated blood. If symptoms become apparent, the most common is lightheadedness or dizziness. In extremely low pressures, syncope may occur. Homeopathy operates on the law of similars; similar similibus curantor. Homeopathic treatment is recommended because it not only can lower and stabilize blood pressure, it also has a positive effect on overall health.

Keywords: Hypotension, diet, homoeopathy

1. Introduction

Blood pressure is the pressure or force of blood exerted upon the walls of the arteries as the heart pumps out blood. Blood pressure is measured as systolic and diastolic. Normal value of blood pressure in adults is 120/80 mm Hg. (120-systolic, and 80-diastolic). When the circulation of blood is too low to supply sufficient oxygen and nutrients to organs or tissues of the body, it is referred as low blood pressure. Although low blood pressure is not a common cause of concern but if blood pressure is markedly low, it can produce many abnormal symptoms, low blood pressure can be a result of any disorders. Such as hemorrhage, endocrine disorders, dehydration, cardiovascular diseases. There is no specific threshold for defining low blood pressure, it is considered too low when it produces abnormal symptoms. Usually when it reaches below 90/60 mmHg considered as low blood pressure [1].

2. Epidemiology

The precise epidemiology of hypotension is highly variable and depends on the exact etiology. In general, elderly patients are more prone to non-traumatic, symptomatic hypotensive episodes. Also, more physically active and healthy patients will have lesser resting asymptomatic blood pressures [2].

3. Risk Factors of Hypotension

- Age above 60
- Dehydration
- Prolonged exposure to heat
- Vitamin B12 and folate deficiency
- Consumption of alcohol
- Endocrine problems such as thyroid insufficiency and diabetes
- Sitting for a prolonged time
- Stress [3].

4. Etiology

4.1 Transient hypotension

- Vascular: Subclavian steal
- Orthostatic: Autonomic insufficiency, Hypovolemia, Drug induced
- Reflux mediated: Vasovagal syncope, Carotid sinus hypersensitivity, Situational (cough syncope)
- Cardiac-Structural: Pulmonary hypertension, Pulmonary embolism, Left atrial myxoma,
Aortic Stenosis, Cardiac tamponade
- Arrhythmias: Brady arrhythmias, Tachyarrhythmia’s
- Miscellaneous: Drugs, Alcohol

4.2 Persistent Hypotension - (Acute)
- **Cardiac:** Myocardial infarction, Myocarditis, Cardiac tamponade, Acute valvular regurgitation MR, AR, Arrhythmias.

4.3 Persistent hypotension (Chronic)
- **Autonomic dysfunction:** Autonomic neuropathy, Multisystem atrophy Hypothalamic disorders, Sympathectomy, High cervical cord lesions, Parkinson’s disease.

### Types

<table>
<thead>
<tr>
<th>Type</th>
<th>Characteristic</th>
<th>Cause</th>
<th>High-risk population</th>
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</thead>
<tbody>
<tr>
<td>Orthostatic hypotension</td>
<td>Occurs while standing up or sitting down very rapidly</td>
<td>Due to a decrease in blood supply because of hypovolemia or low blood volume</td>
<td>Older adults</td>
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<tr>
<td>Postprandial hypotension</td>
<td>Occurs 30 to 60 min after having meals</td>
<td>Due to consuming meals rich in carbohydrates, blood circulation improves in the gastrointestinal system, thus decreasing blood supply to the brain and other organs</td>
<td>Older adults</td>
</tr>
<tr>
<td>Neurally-mediated hypotension</td>
<td>Occurs after standing for prolonged periods</td>
<td>Due to neurological deficits</td>
<td>Children and young adults [3].</td>
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</table>

6. Symptoms
Symptoms of hypotension occur as a result of hypoperfusion of essential organs and this may manifest as:
- Light-headedness
- Dizziness
- Weakness or fatigue
- Blurred vision
- Fatigue
- Fainting [5].

Some serious symptoms caused due to low blood pressure mainly include: Chest tightness, Chest pain, Blueness of lips, Patient may get unconscious, Unresponsiveness on stimulation, Palpitation, Dyspnoea or shortness of breath, Swelling of the face, tongue, and lips [1].

7. Signs
- **Transient Hypotension:** It leads to syncope, which is characterised by pale ashen skin, orthostatic fall in blood pressure.
- **Persistent Hypotension:** Acute onset hypotension is characterised by features of shock and sympathetic over activity such as low volume pulse, tachycardia, cold clammy skin and rapid shallow breathing. Signs of underlying disease dominate in chronic hypotension [9].

8. Differential Diagnosis
- Benign hypotension
- Distributive shock
- Cardiogenic shock
- Hypovolemic shock
- Obstructive shock

9. Investigations
To evaluate the cause of low blood pressure proper, examination of the patient. Examination of pulse, blood pressure, temperature, and respiratory rate should be examined frequently; completely history of the patient including medication, injury or an accident, eating, allergic reaction should be taken with proper attention [1]. Specific testses mainly include:
- Complete blood count
- ECG
- Urinalysis
- Blood electrolytes measurements
- Chest X-ray
- Holter monitoring
- Cortisol levels to evaluate Addison’s disease
- X-ray abdomen
- CT scan of the chest
- Blood culture [1].

10. Management
Assisted ventilation is often required with a bag-valve-mask (BVM). Endotracheal intubation is frequently necessary. Management of postural hypotension:
- Extra pillows under the head at night.
- Extra sodium chloride in diet because salt causes retention of fluids in tissues which has a sort of binding effect on the capillaries.
- Abdominal binder may help.
11. Acute recumbent hypotension
   - Posture: The patient should be in lying position with legs raised [8].

12. Diet for low blood pressure
   - Water: It is very essential to keep hydrated, especially when one is exercising. Drink plenty of water, or energising fluids like coconut water.
   - Foods: High in Vitamin B-12
   - Olives are rich in vitamin E, iron and copper.
   - Coffee: Caffeine is known to temporarily spike up blood pressure.
   - Chewing five to six tulsi leaves every morning may help reinstate normal blood pressure levels [3].

13. Homeopathic Medicines for Low Blood Pressure
Homeopathy is helpful in both cases of a sudden, acute drop in blood pressure as well as in persons with persistently low blood pressure. The first aim of these medicines in treating low blood pressure is to provide symptomatic relief to persons in acute cases. And the next aim is to strengthen the heart muscles and boost the blood circulation to maintain normal blood pressure. While making a prescription for low blood pressure, the cause behind the condition is always taken into consideration. Another advantage of medicines for treating low blood pressure is that they can be used among all age groups with significant success.

13.1 Cactus grandiflorus
Low blood pressure, due to cardiac disease; pulse feeble, irregular, quick, without strength; angina pectoris, cold sweat and iron band feeling all the time; endocarditis with mitral insufficiency; temperature subnormal; endocardial murmurs, excessive impulse [1]. Sensation as of a weight on vertex. Right-sided pulsating pain. Congestive headaches, periodical, threatening apoplexy. Blood-vessels to the head distended. Feels as if head were compressed in a vise. Pulsation in ears. Dim sight [8].

13.2 Camphor officinalis
Low blood pressure, pulse small and weak, sudden sinking of the strength, icy coldness of the whole body, precordial distress; suffocative dyspnoea; anguish; great weakness.

13.3 Carbo vegetables
Disintegration and imperfect oxidation is the keynote of this remedy; low blood pressure; persons who have never fully recover from the effects of some previous illness.

13.4 Crataegus
It is a heart tonic; prevents sudden fall in blood pressure; extreme dyspnoea and weakness; very feeble and irregular heart action. [1]

13.5 Conium maculatum
Vertigo, when lying down, and when turning over in bed, when turning head sidewise, or turning eyes; worse, shaking head, slight noise or conversation of others, especially towards the left. Headache, stupefying, with nausea and vomiting of mucus, with a feeling as of foreign body under the skull. Dim-sighted; worse, artificial light [8].

13.6 Radium bromatum
Lowered blood pressure; great weakness; hypotension due to severe pain in different parts of the body; severe aching pains all over, with restlessness, better moving about

13.7 Kali phosphoricum
Considered as brain tonic, great nervous exhaustion; low blood pressure due to nervousness; great prostration and weakness.

13.8 Natrum mururicum
Heat of sun is unbearable; patients with great craving for salt; great debility and weakness felt in the morning in bed; hypotension may arise from anemia; oversensitive to all impressions; corrects low blood pressure symptoms due to Addison’s disease.

13.9 China officinalis
Low blood pressure due to loss of vital fluids; from dehydration or diarrhea, vomiting; after sexual excess of loss of semen

13.10 Lycopodium
Hypotension along with gastric disturbances; great desire for sweets [1].

14. References
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