THE SOUTH AFRICAN SOCIETY OF OCCUPATIONAL MEDICINE

HYPERTENSION AND EMPLOYMENT

SASOM GUIDELINE 25

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HYPERTENSION AND EMPLOYMENT

1. INTRODUCTION

1.1 Hypertension is a common medical condition that almost exclusively affects people in their working years. The most common complications, CVA and coronary heart disease, are therefore also most common in this group.

1.2 As these have a major impact on the work and vice versa, early detection, proper treatment and monitoring are of utmost importance.

1.3 Management of affected workers should consist of comprehensive health and medical assessments, including occupational factors such as working hours and stressors, hazards and risks at work.

2. DIAGNOSIS

2.1 A diagnosis of hypertension is made when the blood pressure (expressed in mm Hg) is above normal. It should be measured on at least 3 separate occasions, at least 2 days apart.

2.2 The guidelines of Primary Health Care’s Standard Treatment Guidelines and Medicine List, 2008, Department of Health, are used. The following table is taken from page 62 – adaptations are made to include the aim, normal and diabetes mellitus.

<table>
<thead>
<tr>
<th>Systolic</th>
<th>Diastolic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim</td>
<td>&lt;120</td>
</tr>
<tr>
<td>Normal</td>
<td>&lt;140</td>
</tr>
<tr>
<td>Mild</td>
<td>140-159</td>
</tr>
<tr>
<td>Moderate</td>
<td>160-179</td>
</tr>
<tr>
<td>Severe</td>
<td>180≥</td>
</tr>
<tr>
<td>Diabetes mellitus normal*</td>
<td>&lt;130</td>
</tr>
</tbody>
</table>

*The normal values for diabetic patients. For fitness for work the usual values stay the same.

3. ASSESSMENT

3.1 A standard medical consultation, comprising of a detailed history, full clinical examination and referral for special investigations and/or specialist reports should be done when necessary.

3.2 An Occupational Risk Profile should be compiled and worker job specifications determined (see SASOM Guideline 18).

3.3 The findings of all of these should be assessed and a final decision made on fitness-for-work.

3.4 The condition of workers with hypertension should be followed up regularly to ensure compliance with the management of their condition and fitness-for-work.

3.5 Annual medical examinations are advisable, especially for those in the high-risk group.
4. EXCLUSION

4.1 Each worker’s medical condition should be interpreted individually in accordance with job requirements and a decision be made on fitness for work.

4.2 Work and/or the environment could increase blood pressure, eg heat exposure, stress, hard physical labour, severe psychological stress, excessive noise, etc, may elevate blood pressure.

4.3 The National Road Traffic Act of 1996, states that anyone suffering “sudden attacks of disabling giddiness or fainting due to hypertension” is excluded from driving.

4.4 Workers with uncontrolled hypertension must be declared temporarily unfit for duty until such time as the hypertension is controlled or within an acceptable range. As a practical guide it may be expected that physical work will raise the blood pressure into the next higher category, e.g. mild hypertension to moderate and moderate to severe. A worker with mild hypertension could be allowed to continue normal work because the blood pressure could increase to moderate, but the risk to develop complications are acceptable. A worker with moderate hypertension may not continue with normal work because the blood pressure could increase to severe and the risk to develop complications are unacceptable.

4.5 Follow-up visits to the medical facility or Occupational Health Practitioner should be scheduled at least every second month for the high-risk category workers, eg vehicle drivers, fire fighters, workers using moving machinery, scaffolding and people working on heights, etc.

4.6 Driving may continue unless treatment causes unacceptable side effects. Disqualifies from driving if resting BP consistently 180 mm Hg systolic or more and/or 100 mm Hg diastolic or more. Re/licensing may be permitted when controlled provided that treatment does not cause side effects which may interfere with driving.

5. INTERVENTION

Various interventions, including the following, may be implemented to treat and control hypertension:

5.1 Self-monitoring

5.2 Educational interventions directed towards the worker, eg compliance concerning medicine and monitoring, lifestyle modification, eg nutrition and obesity, excessive sodium consumption, physical inactivity, alcohol consumption, smoking, etc.

5.3 Educational interventions directed towards the health professional regarding earlier detection, proper treatment, referral, etc.

5.4 Organisational interventions that aim to improve the health status of the worker, thereby reducing risk of untoward circumstances, appointment reminder systems, DOTS, etc.

BIBLIOGRAPHY

1. Essential Drug List.

2. Society of Endocrinology Metabolism and Diabetes of South Africa (SEMDSA), 2009.
3. SASOM 6 - Guideline on Medical requirements for fitness to drive.

NOTE

The SASOM guidelines are active working documents that are reviewed regularly, or as changes take place in legislation, the work or the workplace.

Your inputs and comments are therefore regarded as most valuable. Please send them to info@sasom.org.