Ministry of Health

Republic of Uganda

UGANDA CLINICAL GUIDELINES

2012

National Guidelines

for

Management of Common Conditions
# TABLE OF CONTENTS

ABBREVIATIONS ............................................................................................................. VI
UNITS OF MEASUREMENT .............................................................................................. XI
FOREWORD ......................................................................................................................... XII
PREFACE ........................................................................................................................... XVI
INTRODUCTION TO UGANDA CLINICAL GUIDELINES 2012 ........................................ XIX
ACKNOWLEDGEMENTS .............................................................................................. XXIV
PRESENTATION OF INFORMATION .............................................................. XXXIII
HOW TO DIAGNOSE & TREAT IN PRIMARY CARE ................................ XXXIX
THE SEVEN STEPS IN A PRIMARY CARE CONSULTATION ..................................... XL
COMMUNICATION SKILLS IN THE CONSULTATION ROOM ........................................ XLIX
“THE GOLDEN MINUTE” ......................................................................................... LII
HOW TO MAKE TIME FOR QUALITY CARE ............................................................... LIII
EVIDENCE BASED GUIDELINES ............................................................................... LIV
EXAMPLE OF USE OF IMCI CHARTS ................................................................. LV
QUALITY CARE ........................................................................................................... LV
CHRONIC CARE ......................................................................................................... LVI
THE CHRONIC CARE SYSTEM .............................................................................. LIX
ROLES IN CHRONIC CARE .................................................................................... LIX
PRESCRIBING GUIDELINES .................................................................................... LXI
1. INFECTIONS ........................................................................................................... 1
2. PARASITIC DISEASES ......................................................................................... 30
3. RESPIRATORY DISEASES ..................................................................................... 62
4. GASTROINTESTINAL DISEASES ...........................................103
5. INJURIES AND TRAUMA ..................................................122
6. ENDOCRINE SYSTEM .....................................................147
7. GUIDELINES FOR APPROPRIATE USE OF BLOOD ............157
8. NUTRITION ..................................................................189
9. CARDIOVASCULAR DISEASES .........................................205
10. SKIN DISEASES ................................................................223
11. NEUROLOGICAL/PSYCHIATRIC CONDITIONS ...............240
12. EYE CONDITIONS ............................................................262
13. EAR, NOSE, & THROAT CONDITIONS ..............................272
14. GENITO-URINARY DISEASES ..........................................295
15. HIV AND AIDS AND SEXUALLY TRANSMITTED INFECTIONS (STI) ..........................................................309
16. OBSTETRIC AND GYNAECOLOGICAL CONDITIONS ........352
17. MUSCULOSKELETAL AND JOINT DISEASES ....................416
18. MISCELLANEOUS CONDITIONS ......................................431
19. POISONING ..................................................................476
20. ZOONOTIC DISEASES ......................................................493
21. ORAL AND DENTAL CONDITIONS ...................................500
22. HEPATIC AND BILIARY DISEASES .................................524
23. CHILDHOOD ILLNESS .....................................................536
24. FAMILY PLANNING (FP) ..................................................586
25. OCCUPATIONAL ILLNESSES ..........................................605
APPENDIX 1. ANTI-TB MEDICINES INTOXICITY GUIDELINES .......615
Repeat these every 4-6 hours till there is improvement

**Beta-blockers** like carvedilol at specialised centres

**In urgent situations**

- **Digoxin injection** loading dose 250 micrograms IV 3-4 times in the first 24 hours
  
  *Maintenance dose*: 250 micrograms daily
  
  *Child*: 10 micrograms/kg per dose as above

**In non-urgent situations**

- **Digoxin** loading dose 0.5-1mg orally daily in 2-3 divided doses for 2-3 days
  
  *Maintenance dose*: 250 micrograms orally daily
  
  *Elderly patients*: 125 micrograms daily
  
  *Child loading dose*: 15 micrograms/kg orally 3-4 times daily for 2-4 days
  
  *Child maintenance dose*: 15 micrograms/kg daily for 5 days

**Note**

- Ensure patient has not been taking digoxin in the past 14 days before digitalizing because of risk of toxicity due to accumulation in the tissues

**Prevention**

- Early diagnosis and treatment of the cause
- Effective control of hypertension

### 9.4 HYPERTENSION

Persistently high resting blood pressure (>140/90mm Hg at least two measurements five minutes apart with patient seated).
Classification of blood pressure (BP)

<table>
<thead>
<tr>
<th>Category</th>
<th>SBP mmHg</th>
<th>DBP mmHg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>&lt; 120</td>
<td>and</td>
</tr>
<tr>
<td>Prehypertension</td>
<td>120-139</td>
<td>or</td>
</tr>
<tr>
<td>Hypertension, stage 1</td>
<td>140-159</td>
<td>or</td>
</tr>
<tr>
<td>Hypertension, stage 2</td>
<td>≥ 160</td>
<td>or</td>
</tr>
</tbody>
</table>

SBP=systolic blood pressure; DBP=diastolic blood pressure

Causes
- In the majority of cases, the cause is not known (essential hypertension)

Secondary hypertension is associated with:
- Kidney diseases
- Endocrine diseases
- Eclampsia
- Medicines (steroids and decongestants containing caffeine and pseudoephedrine)
- Others

Clinical features
- The majority of cases are symptomless and are only discovered on routine examination

May present as a complication affecting:
- Brain (stroke)
- Eyes (impairment of vision)
- Heart (heart failure)
- Kidney (renal failure)

General symptoms include:
- Headache
- Palpitations, dizziness
- Shortness of breath
Differential diagnosis
- Pre-eclampsic toxaemia (PET)
- Eclampsia
- Other causes of stroke

Investigations
- Urine analysis
- Blood sugar
- Plasma urea and electrolytes
- Chest X-ray
- ECG

Management
Treat to maintain optimal blood pressure

Mild hypertension (Stage 1)
- Do not add extra salt to cooked food, increase physical activity/exercise, reduce body weight
- Stop smoking
- Decrease alcohol intake

If all the above fail (within 3 months) initiate medicine therapy
- Give bendroflumethiazide 2.5mg-5mg each morning, avoid in pregnancy and breastfeeding

Moderate and Severe hypertension (Stage 2)
- Bendroflumethiazide 2.5-5mg each morning
- Plus ACE inhibitor e.g.
- Captopril 25-50mg every 8 hours
- Or lisinopril initial 5mg per day
- Or enalapril initially 5mg once daily
- Or calcium channel blocker e.g. nifedipine 20-40mg every 12 hours or every 8 hours
- Or angiotensin II receptor antagonist e.g. losartan 50mg once or twice daily
Or beta blockers e.g. Atenolol 25-100mg daily
Or propranolol 20-80 every 12 hours or every 8 hours
See table on the next page for suitability of medicine for different conditions

9.4.1. Hypertensive emergencies
- Treatment depends on whether there is acute target organ damage, e.g. encephalopathy, unstable angina, myocardial infarction, pulmonary oedema, or stroke.
- If acute end target organ damage present, admit and give parenteral medicines. Give IV furosemide 40-80mg stat.
- Plus IV hydralazine 20mg slowly over 20 minutes. Check blood pressure regularly at least 3 hourly.
- If without acute target organ damage, treat with combination oral antihypertensive therapy as above for severe hypertension

Special considerations (compelling indications)
Patients with hypertension and other comorbidities require special attention, and medicine therapy may differ from that above.

The table below indicates the suitable medicines for such patients.
### CARDIOVASCULAR DISEASES

<table>
<thead>
<tr>
<th>Risk factor</th>
<th>Diuretic</th>
<th>Beta blocker</th>
<th>ACE inhibitor</th>
<th>ARB</th>
<th>CCB</th>
<th>Aldosterone antagonist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart failure</td>
<td>✓</td>
<td>✓*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Post Myocardial infarction</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coronary artery disease</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diabetes</td>
<td>✓</td>
<td>✓*</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Chronic kidney disease</td>
<td></td>
<td></td>
<td>✓</td>
<td></td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
<td>✓</td>
<td>✓</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* carvedilol only

### Caution

△ **Propranolol, atenolol**: Do not use in heart failure or asthma

△ **Diuretics**: Do not use in pregnancy or breastfeeding except in case of pulmonary **oedema** or pre-eclampsia

### Note

◆ **Bendroflumethiazide**: Potassium supplements are seldom required; only use in susceptible patients

◆ **Methyldopa**: Use in hypertension with renal failure and in pregnancy and breastfeeding

### Prevention

- Regular physical exercise
- Reduce salt intake

### 9.5 ISCHAEMIC HEART DISEASE (CORONARY HEART DISEASE)

A condition in which there is insufficient blood flow through the coronary arteries of the heart, thus leading to ischaemia and/or infarction.