**Hypertensive Emergencies UHL Guideline**

**Elevated BP >220/120 mmHg or recent sudden rise**

- **Severe Hypertension**
  - Without evidence Grade III / IV retinopathy or concurrent medical complication / illness

  - Associated complications or any doubts…

  - **Assess – including:**
    - Previous treatment / compliance
    - Consider secondary aetiology
    - Review Baseline Investigations
    - Either increase usual therapy (or add-on treatment) or initiate therapy if newly diagnosed
    - Advise GP FU < 7 days

  **URGENT REFERRAL TO HYPERTENSION CLINIC**

  **Baseline Investigations**
  - FBC / U+Es / Glucose / Urinalysis / ECG / CXR
  - Specialist investigations can usually wait

  **Secondary Hypertension?**
  - Paroxysmal BP
  - Endocrine disorder
  - Radio-femoral delay
  - Renal bruits
  - Hypokalaemia

- **Accelerated / Malignant Hypertension**
  - (Grade III /IV retinopathy)

  - **Treat Accelerated / Malignant Hypertension**
    - Oral therapy will suffice
    - Aim to reduce BP gradually to diastolic BP of 100 mmHg over 24 hours
    - Preferred safe first-line agent: Long acting nifedipine (e.g. Adalat Retard 20 mg bd) or Atenolol 50mg od

  **ADMIT TO HOSPITAL AND SEEK**
  - EARLY OPINION OF HYPERTENSION SPECIALIST (AND NEPHROLOGIST IF EVIDENCE OF RENAL FAILURE)

  - **Admit to ITU / CCU if:**
    - Suspect phaeochromocytoma
    - Eclampsia (INFORM OBSTETRICIANS)
    - Presents as a hypertensive crisis
    - Requires intensive monitoring / Intravenous therapy

  **Treatment of Hypertensive Crises**
  - IV therapy required to control BP effectively aiming for a 25% reduction in mean arterial pressure over 1-4 hrs and a target of 100mmHg diastolic BP over 24 hrs (except aortic dissection <140/90 mmHg)
  - Preferred first-line IV agent is sodium nitroprusside as this provides fine control (care in renal failure)
  - If myocardial ischaemia – suggest nitroglycerine rather than nitroprusside
  - Add-on therapy: IV labetolol
  - Alternative agent: IV hydralazine
  - Often patients are volume depleted, so advise caution with diuretics

- **Hypertensive Crises**
  - Elevated BP associated with:
    - Encephalopathy
    - Severe pulmonary oedema
    - Eclampsia
    - Aortic dissection
    - etc

**Caveats**
- **Phaeochromocytoma** presenting as a hypertension emergency may respond to IV phenoxybenzamine. Avoid β-blockade as first-line therapy
- Scleroderma crises respond to ACE I (e.g. lisinopril) and / or Angiotensin II receptor blockade (e.g. losartan)

**Discharge**

**Baseline Investigations**
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- Specialist investigations can usually wait

**Secondary Hypertension?**
- Paroxysmal BP
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- Radio-femoral delay
- Renal bruits
- Hypokalaemia

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Hypertensive Emergencies UHL Guideline

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C42/2003 Approved by RRCV CMG Director

University Hospitals of Leicester NHS Trust

Trust Ref C42/2003

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Nursing Interventions

- Baseline Observations:
  
  Blood pressure
  Pulse
  Respiration
  Oxygen saturations
  Urinalysis

- If accelerated / malignant hypertension: measure blood pressure hourly until diastolic BP < 100 mmHg on two consecutive readings – then 4 hourly.

- If hypertensive crisis: measure blood pressure every 15 minutes until diastolic BP < 100 mmHg on two consecutive readings – then hourly

- Cardiac monitor if hypertensive crisis.

- Procedure for 24° urine collection if prescribed

- Reassurance