Diagram

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**Diagnosis**

|  |  |
| --- | --- |
| **Stage** | **Criteria** |
| 1 | Clinic BP >140/90 and subsequent ABPM daytime average or HBPM average BP **>135/85** |
| 2 | Clinic BP >160/100 and subsequent ABPM daytime average or HBPM average BP **>150/95** |
| 3 | Clinic BP **>180/120**   * Admit for specialist assessment if:   Signs of retinal haemorrhage / papilloedema / new onset confusion/ chest pain / signs of heart failure / AKI   * If none of the above, arrange urgent ECG, Bloods, Urine ACR and if target organ damage is identified, consider starting antihypertensives immediately without waiting for results of ABPM or HBPM |

**ABPM =** 2 measurements per hour during the persons usual waking hours – average value of 14 measurements used

**HBPM:** 2 measurements BD for 7 days (discard readings on the first day)

Measure blood pressure in both arms

If difference in arms >20mmHg – subsequent blood pressures to be recorded from the arm with the higher reading

*Causes of difference could include supravalvular aortic stenosis so investigate!*

Blood pressure targets:

<80 – Clinic BP 140/90 & ABPM 135/85  
>80 – Clinic BP 150/90 & ABPM 145/85

**Indapamide (1.5mg modified release once daily or 2.5mg once daily)** in preference to conventional thiazide diuretic

**Secondary Causes**

* **Primary hyperaldosteronism inc Conn’s syndrome** (most common cause of secondary hypertension)
* Glomerulonephritis
* Pyeonephritis
* Adult polycystic kidney disease
* Renal artery stenosis
* Phaeochromocytoma
* Cushings
* Liddles syndrome
* Congenital Adrenal Hyperplasia
* Acromegaly
* Steroids, MOAIs, COCP, NSAIDs, Leflunomide
* Pregnancy
* Coarctation of the aorta

**Hypertension in Pregnancy**

Diagnosis:

* **>140/90**
* Or increase above booking readings of >**30/15**

Women who are at high risk of developing pre-eclampsia should take Aspirin 75mg OD from 12 weeks until the birth of the baby i.e.

* Hypertensive disease during previous pregnancies
* Chronic Kidney Disease
* Autoimmune disorders such as SLE or Antiphospholipid syndrome
* Type 1 or 2 diabetes mellitus

Table

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**Table

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**Management of Severe Hypertension**

* Malignant HTN 🡪 Vasoconstriction 🡪 Renal ischaemia 🡪 Renin and angiotensin II release 🡪 Stimulation of RAAS 🡪 secondary hyperaldosteronism 🡪 hypokalaemia and metabolic alkalosis
* Slowly lower the blood pressure to safe levels (160/100) with initial fall in BP not exceeding 25% of the presenting value
  + (Exception is acute aortic dissection where systolic BP should be rapidly lowered to 100 – 120mmHg within 20 minutes)
* **Malignant HTN – Nifedipine**

|  |  |  |
| --- | --- | --- |
| **Condition** | **Contra-indicated drugs** | **Indicated drugs** |
| Aortic dissection | Vasodilators (on their own) | Metoprolol or Labetalol (± SNP), CCB |
| Hypertensive Encephalopathy | GTN, SNP, Centrally acting drugs | Labetalol |
| CVAs | GTN, Centrally acting drugs | Labetalol |
| ACS, MI | Short acting nifedipine | GTN, Metoprolol |
| Acute LVF | Caution with BB, labetalol, hydralazine | GTN, Diuretics, SNP |
| AKI | Caution with Diuretics | Labetalol |
| Malignant HTN | Caution with Diuretics | ACEi, BB, CCB |
| Cocaine | Beta blockers | Diltiazem |