Greater Manchester Adult Hypertension Medication Pathway

Diagnosis & Assessment : ABPM or Average Home BP (Twice Am and Pm x 4 days)
Titrate every 4 Weeks after BP reassessment
Consider referral to community pharmacy for New Medication Service OR ABPM *where available (tiny.one/commpharmacy)*

TARGETS
Age <80; Home/Average **< 135/85 mmHg** or clinic **< 140/90mmHg**
Age 80+; Home/Average **< 145/85 mmHg** or clinic **< 150/90 mmHg**

Clinic BP ≥ 140/90 mmHg (age <80)
or ≥ 150/90 mmHg (age 80+)

Age < 40 - consider referral and secondary causes

Previous history of raised BP readings including in pregnancy, CKD, TIA, Stroke, Hypertensive retinopathy, sleep apnoea, proteinuria, diabetes, unexplained LVH

Take into account the person's motivation and wider situation to tailor support for self-management and lifestyle changes.
Advise reduction in salt & salty foods, reduce alcohol to < 15 units /week, weight to BMI < 25, DASH diet (tiny.one/dashdiet), exercise for 30+minutes x 3-5/week.
Baseline investigations: Lipids • U&Es • LFTs • TFT • HbA1c • ECG • Urine Dip • ACR

Age < 55 or T2 Diabetes
A
LISINOPRIL 10 mg OM

Clinic BP ≥ 160/110 mmHg OR Home Avg BP ≥ 155/105 mmHg
A+C
Combine LISINOPRIL 10mg OM with AMLODIPINE 5mg OM
(combination therapy is approximately 5 x more effective than doubling monotherapy)

Age 55+ or Black African or African Caribbean origin
C
AMLODIPINE 5 mg OM

Not at target

A+C
Increase LISINOPRIL to 20mg OM
(See yellow box for monitoring requirements and eGFR change thresholds)

Consider pre-payment certificates for patients that pay for prescriptions

A+C
Increase AMLODIPINE to 10mg OM

A+C+D
ADD INDAPAMIDE 2.5mg OM

A+C+D
INCREASE AMLODIPINE TO 10 mg, LISINOPRIL TO 20mg WITH INDAPAMIDE 2.5mg OM

RESISTANT TO 3 DRUGS
>90% of patients resistant to 3 drugs are not taking them
CHECK CONCORDANCE

Reconsider salt, alcohol, other drugs incl. NSAIDS, Steroids, Additives eg Liquorice, Cancer Therapies;
? Coarctation, Sleep Apnoea, Obesity

FURTHER OPTIONS
K^+ > 4.6 mmol/L : Doxazosin IR 2-4 mg OD, or Bisoprolol 2.5mg OD
K^+ < 4.6 mmol/L : Spironolactone 12.5mg OM
or refer for specialist advice

Recheck 6 Months to 1 Year
Once stable

Version 9.2 15/07/2023 tiny.one/gmcvdfeedback for any feedback

CKD

CKD (eGFR 25-60 ml/min) and Proteinuria (urine ACR >25mg/mmol):

Without T2DM:
1st Line ACEi/ARB
If ACR then remains > 25 mg/mmol *consider* **Dapagliflozin[1] 10mg OD**

With T2DM:
Ensure already on appropriate ACE-I/ARB.
If urine ACR 3-30 mg/mmol *consider* adding **Dapagliflozin[1] 10mg OD**.
If urine ACR >30mg/mmol *offer* **Dapagliflozin[1] 10mg OD**

See CKD guide (coding, calculating kidney failure risk equation, patient information leaflets and more detailed guidance)

Post Stroke/CKD and Urine ACR > 70mg/mmol: Aim for clinic BP <130/80 mmHg

A

ACEi/ARB
1st Line: LISINOPRIL[1] 10mg OM
(PERINDOPRIL ERBUMINE[1] 4mg OM)
Ramipril is shorter acting
2nd Line: CANDESARTAN[1] 8mg OM
IF ACE-I induced cough
(more effective and safer than Losartan)

Use ARB if Black African or African Caribbean Origin.
Avoid in women of childbearing potential unless on effective contraception (use Amlodipine if trying to concieve).

Check U+E's before and 1-2 weeks after initiation & dose change. If eGFR decreases by < 25%, recheck levels after 1-2 weeks.
If eGFR decreases by > 25% or creatinine > 30% : Investigate for secondary causes and if persists despite these stop the ACE-i OR reduce dose to previously tolerated (recheck 5-7 days)
Angiotensin-converting enzyme inhibitors | Prescribing information | Hypertension | CKS | NICE

C

Calcium Channel Blocker
1st Line: AMLODIPINE 5mg OM
Amlodipine 5mg gives 80% of the effect of Amlodipine at 10mg

2nd Line: LERCANIDIPINE 10mg OM
If troublesome ankle swelling

D

Diuretic
1st Line: INDAPAMIDE[1] 2.5mg OM

Check U&E's before starting, and at regular intervals, within 2 months and ensure Na+ remains > 130 mmol/l, otherwise STOP
Recheck and, if improved, consider **Bendroflumethiazide[1] 2.5mg OD**
Thiazide-like diuretics | Prescribing information | Hypertension | CKS | NICE

[1] **Medication may require dose adjustment based on co-morbidities (e.g. renal/hepatic impairment) always check the BNF if uncertain.**
Patients currently stable on their anti-hypertensives should not be switched due to this guidance.
This pathway is not applicable in pregnancy.