TYPE 2 DIABETES AND BLOOD PRESSURE

NHS Southwark

NHS Lambeth

Check blood pressure
(Use an average of 3 readings measured on 3 separate occasions)

BP <140/80mmHg

Monitor BP annually
Offer & re-inforce preventative lifestyle advice

BP >140/80mmHg - <150/90mmHg

Offer lifestyle advice:
Diet; stop smoking; reduce salt and alcohol intake; increase exercise; avoid NSAIDS if possible

BP >150/90mmHg

Treat & offer lifestyle advice

BP <140/80mmHg

YES

Continue monitoring
(4-6 monthly once stable)

NO

Is the patient of African-Caribbean origin?

NO

Initiate an ACEI once a day

If BP remains uncontrolled: DUAL THERAPY
Add a thiazide diuretic or amlodipine

If BP remains uncontrolled: TRIPLE THERAPY
Add the other drug (thiazide diuretic or amlodipine)
SEE YELLOW NOTES BOX FOR THERAPY OPTIONS AFTER TRIPLE THERPAY

YES

Optimal treatment: Initiate an ACEI PLUS a diuretic (amlodipine is acceptable alternative)**
**Initiating ACEI plus thiazide diuretic, suggested schedule: Initiate ACEI first (e.g. ramipril). If no significant side effects, patient to add thiazide diuretic in 14 days. Review in 4 weeks.

If BP remains uncontrolled: TRIPLE THERAPY
Add the other drug (amlodipine or thiazide diuretic)
SEE YELLOW NOTES BOX FOR THERAPY OPTIONS AFTER TRIPLE THERAPY

Monitor BP 4 - 6 monthly:	Monitor BP more frequently (1-2 monthly):
If blood pressure target has been achieved and remains consistent	• If BP remains uncontrolled • Following changes in drug therapy • In the presence of complications e.g. declining renal function/microalbuminuria

NOTES:

- Aim to achieve BP<140/80mmHg or 130/80mmHg in kidney/eye/cerebrovascular damage
- Combination therapy will be required to meet treatment targets in most people
- If BP control not achieved on triple therapy consider adding alpha-blocker, beta-blocker or potassium-sparing diuretic (care with ACE-Inhibitors (ACEI)) or refer to specialist. Beta-blockers are still effective for certain indications and should be considered in these patients e.g. angina, previous myocardial infarction.
- A calcium channel blocker should be 1st line in women where there is a possibility of becoming pregnant. Avoid ACEI and Angiotensin Receptor Blockers (ARBs).
- Diuretic of choice is usually **bendroflumethiazide 2.5mg** daily
- Re-check HbA1c and lipids within three months of initiating a diuretic
- Use generically available drugs where possible.
- Monitor BP every 4-6 months once BP stable.

ACE inhibitors

- Obtain baseline BP and U&Es before initiation.
- Measure serum creatinine and electrolytes within 2 weeks of initiating ACEI therapy or change in dose. If serum creatinine increases by more than 50% (or >350micromol/L) after initiation – stop ACEI and seek specialist advice. Refer to SELCN[2] ACEI & ARB FAQs document[2] for further information.
- Cough is not necessarily an indication for drug withdrawal and patients should be strongly encouraged to persevere as symptoms usually resolve within 1-4 weeks. If ACEI withdrawal necessary, re-challenge with a different ACEI once symptoms have resolved.
- Only consider an ARB if ACEI is contraindicated or there is continuing intolerance to the ACEI (other than renal deterioration or hyperkalaemia)
- ACEI should be titrated to the maximum tolerated dose.

References:

1. **NICE Guideline Type 2 Diabetes, May 2008, available at www.nice.org.uk**
2. **South East London Cardiac Network (SELCN) ACEi & ARB FAQs, June 2008**
3. **Opinions of diabetologists at GSTFT and KCH**

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