

## Management

### Refer to Croydon Diabetes Guidelines Primary Care management includes

- A pragmatic definition of hypertension in people with diabetes and the threshold at which treatment should be considered, is a **sustained BP of 140/80 mmHg or more**.
- An average of three BP readings over two months is required to determine baseline BP measurements [NICE, 2002].
- Exclude rarer causes of secondary hypertension (medication induced, endocrine or vascular disorder).
- In people with Type 1 diabetes, hypertension develops after several years in about 30% patients and usually reflects the development of diabetic nephropathy [Arauz-Pacheco et al, 2002]. In type 2 diabetes, the development is more gradual and may be coincidental.
- **Monitor urine for protein.** Dipstick positive (microalbuminuria >30mg/24hrs) is the first stage of abnormal albumin excretion in the urine. If positive proceed to '24 hour urine collection for protein' or a 'urine albumin and creatinine concentration' test. Proteinuria >300mg/24hrs (or urinary albumin:creatinine ratio greater than or equal to 30 mg/mmol) corresponds to overt nephropathy and warrants referral.
- For patients with sustained BP > 140/80mmHg, lifestyle management as a lone intervention is suitable **only** for patients with a 10 year coronary risk profile < 15% and dipstick negative urine for protein. When the coronary risk profile of a hypertensive and diabetic patient is > 15% at 10 years or they develop proteinuria, medication must be started in accordance with the **2004 NICE guidance**. Please follow the Croydon recommended drugs guide.
- Optimise blood glucose control as this can minimise risk of cardiovascular complications.
- In observational studies of people with hypertension, someone with diabetes has twice the risk of CVD as someone without diabetes [American Diabetes Association, 2003].
- Consider advice on other factors contributing to CVD risk, such as diet, weight management, exercise, BP control, lipid reduction and smoking cessation.

### Specialist management includes

- Investigation of causes of secondary hypertension.
- Initiation of more complex antihypertensive drug combinations with appropriate monitoring.
- Management of patients with renal failure

## When to refer

### Emergency [discuss with on-call specialist]

- Symptoms of malignant hypertension - where very high blood pressure causes headaches, focal CNS signs and seizures. Fundoscopy may show retinal haemorrhages.

### Urgent out-patient referral [liaise with specialist and copy to CAS]

- Patient with very high blood pressure hard to control on combination medication or with problematic interactions / intolerance.
- Patient with urine positive for proteinuria.
- **Pregnant** diabetic patient who develops hypertension.

### Refer to CAS

Diabetic patient with problematic hypertension control or complex medication interaction / intolerance.

### Refer to RARC

- if the patient does not meet the referral criteria above consider referral to CAS requesting a RARC appointment.