



**Wolverhampton  
Diabetes Care**

# **What Care to Expect**

## **Hypertension, Nephropathy and Vascular Risk Strategies**

### **Hypertension**

#### **Target**

All patients should receive regular blood pressure review and have intervention to maintain their systolic blood pressure consistently <140mmHg .

#### **Background**

Two thirds of the diabetes population have a systolic blood pressure >140mmHg. Hypertension contributes to micro and macrovascular risk.

#### **Hypertension definition**

Systolic blood pressure > 140 mm Hg

#### **Risk**

Risk increases with increased systolic blood pressure above 140 mm Hg.

#### **Lifestyle**

All patients with diabetes should be advised about diet, salt intake, alcohol consumption, smoking cessation and exercise.

#### **Therapeutics and concordance**

As a general principle blood pressure reduction is paramount over choice of agent. Reduce the number of tablets taken daily to a minimum by using once daily and combination preparations where possible. Use evidence-based doses.

#### **Drug intervention**

As well as life style intervention, drug intervention to lower blood pressure should occur for sustained blood pressure >140/ 80mmHg., especially if there are any of the following: overt proteinuria, microalbuminuria (ACR >3.5mg/mmol), 10 year primary CVD risk >20% (CHD risk >15%), established secondary prevention.

#### **Principles of drug therapy**

Use drugs in recommended target doses. Most patients with diabetes require multiple agents. Diuretics, Beta-blockers, ACE Inhibitors, long acting dihydropyridine Calcium Channel Blockers and Alpha blockers will need to be used in various combinations.

#### **Drug choice - see table**

This depends on the individual patient profile and co-morbid conditions e.g. Ischaemic heart disease, asthma etc. Select your 1st, 2nd, 3rd and 4th line agents based on this profile. For non-complicated patients follow NICE guidelines for drug choice.

#### **Step titrate to target**

Modify antihypertensive therapy at 4 to 8 weekly intervals until target attained and then review 3 monthly to maintain control. Ensure appropriate monitoring is carried out whilst dosage adjust is undertaken.

# Microalbuminuria management

## Microalbuminuria testing

This only requires a single random urine sample sent to the lab. Repeat testing is not required other than annually. The result does not need to be repeated for confirmation. Excluding a UTI using an MSU is not necessary for asymptomatic patients.

## Microalbuminuria driven intervention

Patients with confirmed dipstick positive proteinuria or persistent microalbuminuria (>10 mg/mmol) should be treated with an antihypertensive agent regardless of their systolic blood pressure, using an ACE Inhibitor as the preferred first line agent (or ARB if patient has a persisting on ACE) unless there are contraindications to antihypertensive therapy. In particular, those patients with an ACR > 3.5 mg/mmol but, <10mg/mmol should have anti-hypertensive therapy if SBP > 140 mmHg.

# Vascular Risk Intervention – Aspirin and Statins

## Target

There must be regular review of vascular risk with effective blood pressure management, smoking cessation. Drug intervention with aspirin and statins should be according to protocol and driven by calculated vascular risk.

## Primary prevention

There remains wide debate about threshold for treatment initiation. For type 2 diabetics treatment with aspirin and statins should be based on the 10-year CVD/CHD risk score. In those patients considered to have a CVD risk >20% or CHD risk greater than 15% a Statin should be prescribed if the total cholesterol is greater than 5mmol/L. Aspirin 75mg should be prescribed if SBP is <150mmHg.

## Secondary prevention

All patients with total cholesterol >5mmol/l should be prescribed Simvastatin 40mg. It is thought that national guidance will lower treatment threshold in line with recent evidence. All patients should be on aspirin provided SBP <150mmHg.

## Treated Cholesterol target

Cholesterol of <5mmol/l or a 25% reduction whichever yields the lower cholesterol.