

## PREVALENCE AND SCREENING

- The prevalence of diabetes in the UK is 3%
- It increases with age: over 7.7% of people aged > 65 have diabetes
- Prevalence in African, Asian and Afro-Caribbean people is > 6%
- Up to 25% of people of Asian origin aged > 60 have diabetes

The most recent Position Statement (2006) from Diabetes UK (available in full on their website) recommends the following people be screened for diabetes:

- White people aged over 40 years and people from Black, Asian and minority ethnic groups aged over 25 with one or more of the risk factors below:
  - ◆ A first degree family history of diabetes
  - ◆ A BMI of 25–30 kg/m<sup>2</sup> and above, together with a sedentary lifestyle
  - ◆ A waist measurement of over 94 cm (37 in) for White and Black men and 80 cm (31.5 in) for White, Black and Asian women, and > 90 cm (35 in) for Asian men
- People who have ischaemic heart disease, cerebrovascular disease, peripheral vascular disease or treated hypertension
- Women who have had gestational diabetes who have tested normal following delivery (screen within 6 weeks of delivery, 1 year post-partum and then 3-yearly)
- Women with polycystic ovary syndrome who have a BMI > 30
- People who are known to have impaired glucose tolerance or impaired fasting glycaemia
- People who have severe mental health problems
- People who have hypertriglyceridemia not due to alcohol excess or renal disease

Other authorities also recommend testing men with erectile dysfunction as this can be the first presenting symptom for type 2 diabetes.

## VITAL POINTS

- \* *People of Asian origin are more likely than others to develop type 2 diabetes, and at an earlier age*
- \* *Flag the notes of those with a family history of diabetes*
- \* *Flag the notes of those with a history of gestational diabetes*
- \* *Screen those at risk of developing diabetes every 3 years*

## IDENTIFICATION

- You should 'think diabetes'!
- A practice with 2,000 patients is likely to have 60 people with diabetes
- About 80% of people with diabetes are managed in primary care, ie of 60 patients on your diabetes list, 48 will be managed in your practice
- Of those presenting to your practice with diabetes, many will have diabetes treated with diet and exercise alone. Others will be treated with diet, exercise and a combination of tablets with and without insulin
- Teach administrative staff (clerks/receptionists) about diabetes: to recognise the names of test strips, drugs and insulin on prescriptions, and identify people with diabetes on their notes
- Give responsibility for people with diabetes to a 'named' person in the practice
- Ensure that all staff have appropriate knowledge of diabetes
- Check existing registers
- Check prescription lists
- Check existing 'labelled diabetes' patient records
- Check patients who are new to the practice
- Add newly diagnosed patients to the register

- Be extra vigilant with those treated by diet alone
- Identify the housebound with diabetes – check records
- Display posters in the practice
- Communicate with all members of the primary care team, especially those caring for people who are elderly or have a mental illness or learning difficulty
- Contact the local pharmacist(s); they may know about the local diabetes population

### ***What do you need to know?***

- The total population covered by the practice
- The percentage of people aged 65 years or over in the practice
- The ethnic composition of the practice

### ***Finally:***

- Add newly identified people with diabetes to your list
- Label the patient records 'Diabetes'
- Use this list as the basis of a diabetes register

## **WHERE AND HOW PEOPLE PRESENT**

### **IN PRIMARY CARE**

- At the surgery
- In health promotion clinics
- As new patients to the practice
- At 'home' in screening programmes, eg for older people (> 75)
- At routine medical checks, eg for insurance purposes
- To the community pharmacist, eg presenting with symptoms
- After a visit to the optometrist (optician) for a routine vision check
- At NHS walk-in centres, or via NHS Direct (telephone helpline)
- Self-diagnosis – anywhere

## Symptoms of type 2 diabetes: what to look for?

Symptoms (may develop slowly over months or years). They may include some or all of the following:

- Thirst
- Polyuria/nocturia
- Incontinence in elderly people
- Tiredness/lethargy
- Mood changes (irritability)
- Weight loss
- Blurred vision
- Thrush infections (genital)
- Recurrent infections (boils/ulcers)
- Tingling/pain/numbness (in feet, legs, hands)
- Unexplained symptoms

You might want to produce a poster or photocopy the one on page 30 to encourage people with undiagnosed diabetes to come forward. Alternatively, you can obtain such a poster from Diabetes UK (see page 115).

## DIAGNOSTIC CRITERIA

Diagnosis of diabetes has important legal and medical implications so diagnosis must be definite:

- Do not base diagnosis on glycosuria or a stick reading of finger-prick blood glucose; use these only for screening
- Measurement of HbA1c is not currently recommended for screening
- Diabetes should be confirmed on a venous plasma blood sample sent to a laboratory. It will be confirmed by:
  - ◆ Random plasma blood glucose concentration of  $\geq 11.1$  mmol/l, or
  - ◆ Fasting plasma glucose concentration of  $\geq 7.0$  mmol/l
- Some people with glycosuria have impaired glucose tolerance. This is diagnosed by an OGTT, organised with the local laboratory or in your health centre:

- ◆ Fasting blood glucose, then 75 g glucose or 440 ml of Lucozade
- ◆ Take blood 2 hours later
- ◆ Diabetes = fasting blood glucose  $\geq 7.0$  and at 2 hours  $\geq 11.1$  mmol/l
- ◆ Because these results are so important, send blood to the laboratory for glucose measurement, rather than using a glucose meter
- HbA1c should be measured as a baseline recording
- Refer children with suspected diabetes urgently: DON'T WAIT for results of diagnostic tests

### VITAL POINT

*\* If you suspect diabetes in a child, refer them urgently by telephone to a hospital paediatric department for confirmation of the diagnosis*

## IMPAIRED FASTING GLUCOSE

## AND IMPAIRED GLUCOSE TOLERANCE

- Close monitoring of people with impaired glucose homeostasis is recommended (by the WHO Expert Committee)
- There are two categories of glucose homeostasis: impaired glucose tolerance (IGT) and a new category of impaired fasting glycaemia (IFG)
- IGT is defined by a 2-hour glucose during an oral glucose tolerance test (OGTT) of 7.8–11.0 mmol/l, and a fasting plasma glucose of  $< 7.0$  mmol/l
- IFG is defined by a fasting glucose of 6.1–6.9 mmol/l
- Two abnormal test results on two different days are needed to confirm the diagnosis. This is important in a patient with no symptoms
- Those diagnosed as having IGT and IFG are at risk of developing diabetes later in life; they should be advised about lifestyle and dietary points to lessen this risk
- Such people need to be screened for diabetes every year
- Screen the same people for cardiovascular disease