Preventing type 2 diabetes in people at a high risk

Type 2 diabetes is a long-term condition associated with a variety of risk factors including genetic disposition, family history, ethnic origin, obesity, hyperlipidaemia, hypertension and a sedentary lifestyle.

There are two main causes of type 2 diabetes:
- Insufficient production of insulin in the pancreas;
- Resistance to the action of insulin – particularly in muscles, fat cells and the liver.

Type 2 diabetes is a metabolic disorder and causes raised glucose levels in the blood. It is associated with serious complications such as heart disease, stroke, kidney disease, blindness, amputations and erectile dysfunction.

People from certain communities and population groups including those of South Asian, African-Caribbean, black African and Chinese descent are genetically more predisposed to developing diabetes.

There are approximately 2.9 million people diagnosed with diabetes in the UK (Diabetes UK, 2011) and it is estimated that around seven million people are at high risk of developing type 2 diabetes (National Institute for Health and Clinical Excellence, 2012).

NICE (2012) has published new guidance on identifying people at high risk of developing type 2 diabetes and interventions to help reduce the risk or delay the onset of the condition.

Risk assessment

The guidance recommends that GP surgeries offer risk assessment to:
- All adults aged 40 and above (except pregnant women);
- Those aged 25-39 of South Asian, Chinese, African-Caribbean or Black African descent, and other high risk black and minority ethnic groups (except pregnant women);
- Adults with conditions that indicate an increased risk of type 2 diabetes, including cardiovascular disease, hypertension, obesity, stroke, polycystic ovarian syndrome, a history of gestational diabetes and mental health problems.

Implications for nursing practice

The new guidance does not advocate a national screening programme for type 2 diabetes. Instead, it reminds practitioners that age is not a barrier to being at high risk of or developing, type 2 diabetes.

The recommendations can be used alongside the NHS Health Check programme, the national vascular risk assessment and management programme for people aged 40-74 years.

The new NICE recommendations focus on two major activities:
- Identifying people at risk of developing type 2 diabetes using a staged (or stepped) approach. This involves a validated risk assessment and a blood test – either the fasting blood glucose or the HbA1c test – to confirm high risk;
- Providing those at high risk with a quality-assured, evidence-based, lifestyle-change programme to prevent or delay the onset of type 2 diabetes.

Recommendations include encouraging adults to:
- Assess their risk of type 2 diabetes using a validated self-assessment questionnaire. An example is the online diabetes risk score at www.diabetes.org.uk/Riskscore. The risk assessment tool for health professionals is available at: tinyurl.com/prof-risk-assess or GP practices can use a computerised risk score based on patient records;
- Contact their GP surgery or practice nurse if the assessment suggests they are at risk.

The guidance suggests that health professionals, pharmacists and community groups should offer risk assessments and they can also help people to complete and interpret them.

Risk score estimation, interventions and review

People who have a low or intermediate risk score can be given brief advice on making healthy lifestyle choices, and should be offered a reassessment every five years.

Those who have had their risk confirmed by a blood test should be referred to a local intensive lifestyle-change programme. These programmes will provide ongoing, practical, tailored advice, support and encouragement to help people to more physically active, achieve and maintain a healthy weight, and eat a healthier diet, which can help prevent or delay the progression to diabetes.

Blood tests may also identify those who have diabetes but are undiagnosed.

Conclusion

Type 2 diabetes is a serious condition, which increases both morbidity and mortality, and presents a huge challenge to the NHS. This new NICE guidance sets out clear, evidence-based recommendations that, if implemented, can help prevent the onset of the condition. NT

The guideline is available for download at www.nice.org.uk/PH38

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References