

1. 90% of all people diagnosed with diabetes have type 2 diabetes. It is characterised by insulin resistance and/or insulin deficiency.
2. Behavioural modification (diet and physical activity) should always be promoted as first line therapy even where drug therapy is indicated.
3. Pharmacologic management of glycaemic control can be achieved using oral hypoglycaemic agents or insulin. The emphasis on initial therapy for type 2 diabetes has been shifting from sulphonylureas to metformin.
4. Most patients with type 2 diabetes will eventually fail to respond adequately to oral hypoglycaemic agents and will require insulin therapy.
5. Individuals exhibiting symptoms of diabetes mellitus or reaching diagnostic thresholds for diabetes are at increased risk of death due to cardiovascular disease. The metabolic syndrome is a cluster of fasting hyperglycaemia, abdominal adiposity, dyslipidaemia and hypertension. People with metabolic syndrome are at increased risk of cardiovascular disease and diabetes. Metabolic syndrome frequently coexists with diabetes.
6. Atherogenesis is potentiated by the earliest stages of glucose intolerance. Patients with impaired glucose tolerance have up to twice the cardiovascular risk of those with normal glucose tolerance and therefore need aggressive risk management at the earliest opportunity.
7. Along with glycaemic control, it is important to prevent cardiovascular disease through optimisation of risk factor modification. This includes aggressive treatment of hypertension, lipid lowering, smoking cessation and aspirin therapy.
8. Current guidelines suggest a number of treatment targets including a target blood pressure goal <130/80 mmHg, an LDL cholesterol target <2.5mmol/L and an HbA1c target <7.0% (NZGG,2003).
9. Excessive self-monitoring of blood glucose appears to be occurring particularly in those with type 2 diabetes controlled on diet or oral medication. The frequency and pattern of monitoring depends on the clinical situation. It should not always be assumed to be beneficial.

Diabetes

Selected Reviewers Comments

"It is very important to make it absolutely clear that the cornerstone of management of type 2 (and, indeed, an important aspect also in type 1) is diet or, better still, lifestyle therapy which includes both diet and exercise. For the vast majority of patients who are prepared to comply with lifestyle therapy, the result can be far more effective than any form of tablet treatment and, indeed, tablet treatment when it is required is much less effective if it is not combined with attention to diet and exercise". Jim Mann

"Type 2 diabetes is usually (though not always) one of the components of the metabolic syndrome resulting from insulin resistance. It may be that the hyperglycaemia predominates but very often other features of the metabolic syndrome are present and it is probably this factor which contributes a considerable extent to the increased cardiovascular risk". Jim Mann

"Glibenclamide is becoming increasingly redundant. It is associated with a greater risk of hypoglycaemia in a few studies, and we do generally avoid it in patients over 65. It is probably also a bad choice for patients at the time of an infarct and renal failure and so, generally, most of my patients are on gliclazide and glipizide now. I haven't used tolbutamide for the last decade". Rick Cutfield

"The glitazones are relatively new to New Zealand and having been unfunded, we have had very little experience. However, overseas experience suggests that they are equipotent with sulphonylureas and metformin, and provide a useful alternative to metformin and may be quite useful in addition to metformin". Rick Cutfield

"Age is not necessarily a contraindication to starting insulin treatment for type 2 diabetes and there are huge numbers of older people who are just not getting satisfactory quality of life who are or who can be vastly improved by insulin treatment". Jim Mann

"Blood glucose self-monitoring by itself may not improve glucose control but when it is linked to changes in behaviour or medication, then it is important. For patients on diet only, and probably those on metformin only, there is little point in frequent monitoring. However, for those on sulphonylurea or insulin, then monitoring is crucial although, the frequency depends on how often management changes occur". Rick Cutfield

"Review of thousands of Auckland patients indicates that the hardest thing to do is to control the blood pressure, and it will often need multiple therapies. There is a need to review compliance. Many guidelines avoid the issue, but I think working closely with pharmacy, using pill-counters or patient medication cards, etc, is going to be very helpful because many of our patients, of course, don't take all of the medicines that are prescribed". Rick Cutfield

"Most patients will need a statin, but I have a problem with the blanket statement that some people make that everybody with diabetes should be on a statin". Rick Cutfield

"A statin alone in someone who has a predominant hypertriglyceridaemia may actually lead to a deterioration of triglyceride levels and if the decision is made that such a person should go on a statin almost certainly then they will need combination therapy with a statin plus a fibrate which in turn signals close monitoring with regard to side effects". Jim Mann

Rick Cutfield, Physician and Endocrinologist, Waitemata Health, Auckland.
Jim Mann, Professor of Human Nutrition and Medicine, University of Otago.