

Management of type 2 diabetes: Steady as she goes!



Ken MacLeod

Those of you who recently waited with bated breath for the release of the recently updated NICE guideline on type 2 diabetes (2008), wondering anxiously if they would herald a sea-change in clinical practice and promote a flurry of altered algorithms, patient recalls and prescription changes can breathe a sigh of relief. NICE has opted for a conservative consensus (well there's a thing!) and not rushed to endorse the plethora of new agents hitting the marketplace, adding to the choice and complexity of managing type 2 diabetes. And I, for one, take my hat off to them! It's not that we should resist change, it's that change for change's sake and change without good evidence is not good clinical practice, and is often regretted.

Exciting though the new drugs and insulin preparations are, and welcome for the increased choice they offer, the problem with them is that the trials required for licensing purposes – which, understandably, focus on safety and efficacy in comparison with placebo – don't really tell us how to deploy the drugs in current practice. There are lots of equivalence data. The new drugs arrive on a tide of non-inferiority studies with tantalising advantages for surrogate markers, but few hard outcome measures. For the most part the therapies are equivalent in terms of their glucose lowering effects, and they are often significantly more expensive than the currently available therapies. There often isn't any good evidence as to whether they should displace existing therapies or how they are best integrated with existing therapies. This is reflected in the guidance and I think the common-sense compromise which emerges is helpful for clinical practice and good for patient care.

The guidelines themselves are commendably clear. While the meat of the recommendations

is sandwiched between a fair helping of 'motherhood and apple pie' (all things good) in the preamble and conclusion; the meat, when it comes, is lean, relevant and pragmatic. Below I have selected a flavour of the highlights and controversies.

Education

High quality, effective, goal-orientated and explicit patient education remains central to good patient care, and the benefits of intensive lifestyle management should not be underestimated. If successful, this is likely to reduce the long-term pharmacological burden.

Targets

More realistic, pragmatic and achievable target setting that, for example:

- Avoids pursuing highly intensive glycaemic management levels to an HbA_{1c} of <6.5%.
- Individualises targets for glycaemia management, reflecting the risk of intensive control (principally hypoglycaemia).
- Targets a blood pressure of 140/80mmHg, rather than some of the more vigorous levels quoted in the past.
- Pursues the more intensive lipid targets of total cholesterol <4.0mmol/l and LDL-cholesterol <2.0mmol/l which contribute to reducing macrovascular risk but are 'easy' to achieve safely in most individuals.
- Recognises and addresses the high prevalence of depressive illness found in people with diabetes.

OHAs

The first-line use of metformin followed by sulphonylureas seems to satisfactorily reinforce the standard approach, although I feel the guidance with respect to metformin use and renal impairment is surprisingly cautious and may deprive high-risk groups of effective therapy.

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Insulin

When introducing insulin the following points seem key.

- Add basal NPH insulin to existing oral agents as first step rather than the more expensive insulin analogues.
- Use premixed insulin when HbA_{1c} >9.0%.
- Use a structured education programme for insulin that includes active dose titration.

Lipid lowering

The choice of therapies for lipid lowering that secures a statin in first (simvastatin 40mg), second (simvastatin 80mg), and third position (a more potent statin such as atorvastatin or rosuvastatin) seems logical, and the advice to avoid nicotinic acid and omega-3 fatty acids for primary prevention keeps things simple. I was surprised, however, at the apparent enthusiasm for fibrate plus statin combinations. On the evidence-based principle we are still in need of a large outcome study here.

Conundrums

There are, inevitably, a few enigmas. The guidance attempting to target and, thus, limit the use of exenatide is understandable given associated costs; but while the selection of patients with BMI>35kg/m² in those of European descent is arbitrary and exclusive, we are told to consider exenatide in those with 'specific problems of psychological, biochemical and physical nature arising from high body weight,' which seems much more inclusive and, indeed, could potentially include everyone who is overweight. For the moment the guideline committee say both, and a few other conditions besides, must be satisfied before considering exenatide but I doubt if this will translate into practice. Furthermore, although exenatide gets a mention, the opportunity to include comments on the place of the gliptins and the long-acting insulin detemir have been missed. This is difficult to understand since insulin detemir came to market before exenatide, and all three agents are currently out there and being used. It does pave the way for a new set of guidelines and updates which are, we are told, on their way to your inbox soon!

For the moment, though, these guidelines are helpful, pragmatic and useful. They allow a gentle readjustment of the tiller that helps us set our compasses on the main quality markers of effective modern management of type 2 diabetes and how to achieve them – Steady as she goes! ■

NICE (2008) *Type 2 diabetes: the management of type 2 diabetes (update)*. NICE, London