



Analogue insulins

ABCD welcomes the publication of Holden et al. although with some caveats. Holden's analysis estimates the additional cost to the NHS of the use of analogue insulins rather than human insulin. Whilst the advantages of analogue insulins in terms of their more physiological profiles should not be forgotten, at a time when financial considerations are at their most pressing, a reminder of the cost implications of our clinical practice is appropriate.

Insulin was originally extracted from animal pancreas, but the introduction of synthetic insulin in the early 1980s opened the way for the production of human insulin. It was a logical progression, therefore, to analogues of insulin, initially with a more rapid onset of action and subsequently to longer acting analogues of insulin. An assessment of the clinical and cost effectiveness of the insulin analogues has been included in major clinical guidelines, most notably those issued by NICE for the management of type 1 and type 2 diabetes (CGs 15 and 66) and SIGN guideline 116. The practicalities of the short duration of action of rapid acting analogues and single daily dosing regimen of longer acting analogues were noted together with limited evidence for a reduction of hypoglycaemia with these agents. The published guidance is consistent in recommending human insulin as first line therapy with consideration of analogues in certain circumstances. These circumstances include the use of long acting analogues where an individual needs external help to administer insulin or has suffered troublesome nocturnal hypoglycaemia. Rapid acting analogues could be considered where injection immediately before food is preferred and where there are marked postprandial glucose excursions with human soluble insulin. For those individuals treated with a basal bolus insulin regimen, therefore, rapid acting analogues will remain the treatment of choice.

Since their launch, there has been an increase in the use of analogue insulins to the point where their use may not be supported by published guidance in some instances. The value of the report of Holden et al. lies in the attention it focuses on the cost of use of analogue insulins in preference to human insulins. The authors discuss the limitations of their report. They comment on the assumptions used to reach their conclusions and likewise comment on the impracticality of replacing all prescriptions for analogue insulin with a human insulin preparation. Nevertheless, the point should be well taken: there is a cost associated with the use of such preparations.

While valuable, this report should not prompt any sudden changes in prescribing policy: many patients are well controlled on analogue insulin, and their treatment should not be changed in response to this analysis. The major clinical guidelines for diabetes leave the option of use of analogue insulin to the clinical judgement of the clinician and this report should not change that position. Nevertheless, the reported figures should act as a timely reminder that we should consider, with each prescription, precisely why it is judged that an insulin analogue will offer benefit over and above that conferred by a less costly human insulin.

ABCD welcomes innovative treatments for diabetes, including new insulins that offer those patients who are experiencing problems with established treatments the prospect of better control with fewer problems. However, the Association supports a view that prescription of analogues of insulin should be considered only when the use of human insulin has been considered and rejected.

References

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Declaration of Interest

ABCD (Diabetes Care) Limited receives financial support from Lilly, NovoNordisk and Sanofi-Aventis and, all of whom manufacture analogue insulins that are available in the NHS.

ABCD members are diabetes specialist physicians, all of whom treat patients with diabetes.