

Insulin self-adjustment: is it suitable for everyone?



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With the current shift in the management of diabetes into primary care, the skills required for the initiating and subsequent management of insulin therapy, particularly in type 2 diabetes, are of paramount importance. One concern that primary care teams have in connection with these skills is the time needed not only to initiate the insulin, but, just as importantly, to also provide effective follow up.

Guidance from the National Institute for Clinical Excellence (NICE, 2004) and the National Service Framework (NSF) for diabetes (Department of Health, 2003) emphasise the need for empowerment of the individual with diabetes to use their own judgement in self-management. If successful, self-management would not only hand over control to the individual, but would also reduce the amount of support required from the diabetes team, whether in primary or secondary care.

To achieve this there must be robust health education in place to give healthcare professionals the confidence to enable the individual to maximise the potential of self-care. It is important that the healthcare professional is able to hand over the locus of control to the individual as this has been shown to improve outcomes. Williams et al (1998) produced evidence that people who made their own decisions achieved significant reductions in their HbA_{1c} levels. Although this may seem labour intensive at the beginning, the time saved in long-term follow up will adequately compensate for this.

At last there is a move away from decision-making by the healthcare professional and a move towards giving relevant information to the individual to allow them to make an informed choice.

A complex process

Self-management, when said quickly, doesn't sound too difficult. Realistically, it is an extremely complex process requiring the individual to acquire in-depth knowledge of his/her condition and the outside influences that affect it. Lifestyle, diet, exercise and insulin cannot be separated if those taking insulin are to succeed in managing their condition. The combination of blood glucose monitoring, carbohydrate (CHO) intake and insulin requirements and adjustment must be learned as a whole package. Although NICE (2004) covers the link between blood glucose monitoring and insulin delivery, it is not specific about dose adjustment. Kinch et al (2004) believe that many individuals adjust their insulin doses to some degree but 'lack any underpinning rationale'. This only produces frustration.

The concept of Dose Adjustment for Normal Eating (DAFNE, 2002; Sumner et al, 2003) and the rapid increase in the use of continuous subcutaneous insulin infusion (CSII) in type 1 diabetes has produced a return to CHO counting

and adjustment of insulin. Many people with long-established type 1 diabetes are more familiar with CHO counting than the healthcare professionals who are assisting them in their day-to-day care! However, it is important that the concept of CHO counting is brought up-to-date and is combined with blood glucose monitoring and insulin adjustment.

In his article on page 173, Barry Mayled, who has type 2 diabetes and now requires insulin therapy, talks of going through a 'learning curve' of balancing insulin with diet and exercise and the difficulties he experienced which contributed to this. He has become conversant with adjusting his own insulin. He commends the diabetes team who help him with his diabetes and who have given him all the information he needs to make this possible. He also found that a recommendation from the team to change to a long-acting analogue insulin significantly reduced his night-time hypos, thereby easing the amount of self-adjustment necessary.

Is it suitable for everyone?

Can everyone adjust his/her own insulin? Barry learned over a period of time, based on his experiences, but as Jill Rodgers recognises in her article on page 176, this was before the outcomes of the UKPDS (1998). It is now far more common for people with type 2 diabetes to progress to insulin.

This aspect of therapy can be taught at the very beginning of insulin treatment. Many centres teach self-adjustment from the start and, anecdotally, this appears to be the most appropriate time. For those with diabetes, change is frequently more difficult later on than learning something at the very start of their journey in diabetes. Stockport uses in-house literature to support this, but only when the team feels that the user is not just aware of how and when to adjust, but is also aware of the complexities that make the whole process possible. These leaflets on all insulin regimens are used as a resource on the local insulin initiation course for primary care run by the diabetes team.

There are exceptions to the ability and desire to self-adjust, and with everything in diabetes, the user must be assessed on an individual basis. Their goals may be totally different from those of the health professional and must be respected.

In empowering the patient, we may put physical and psychological stresses upon them that are difficult to accept without robust support. There will always be the minority who require ongoing input to their management from the diabetes team. However, in conclusion, it would be dangerous to assume that we know those patients who are best placed to self-adjust and it is important to give everyone the opportunity to try. ■

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