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Back to Oral Hypoglycemic Drugs after Ten Years of Insulin Injections: An Egyptian Case Study

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Editorial

In my clinical practice, the author noticed many diabetic patients who were inappropriately prescribed insulin injections after failure of oral hypoglycemic drugs to maintain adequate glycemic control. In this editorial I'll present one of these cases addressing briefly the reasons for this malpractice, how to avoid and more importantly how to suspect and manage.

A slim 53 years old Egyptian diabetic female came to my clinic suffering from recurrent abscesses, her diabetic history revealed that she were on different doses of gliclazide and metformin for 8 years and her physicians changed the regimen to be twice daily injections of biphasic isophane insulin 30/70 for ten years. I've ordered hemoglobin A1C (HbA1C) and found it to be 9 confirming the elevated fasting and postprandial blood glucose readings as well as the inadequate glycemic control.

Added to the antibiotics, I've started to add 10 units of insulin glargine and reduced 15 units of her previous insulin regimen and I've also stressed the crucial importance to avoid stress and nervousness as much as possible in addition to a short summary of the balanced diet beneficial for diabetic patients. The patient was so enthusiastic and the abscesses were treated and more importantly didn't recur. Within 9 months she's experienced improved quality of life to the extent that she's consulted me to stop insulin glargine intake after three months and I've approved her request and continued the low dose of modified biphasic insulin regimen without noticing any remarkable increase in the blood glucose readings. Further, I've noticed a steady decrease of HbA1C readings to 7, 6 and eventually 5 and at that time I've asked for a consented trial of vildagliptin 50 mg and metformin 1000 mg to totally replace the insulin and this new regimen proved valid both clinically and laboratory for her helped by the highly elevated mood she's experienced after stoppage of insulin shots. Within the next six months, she's experienced uncontrollable stressful life conditions and I've added glimepride 2 mg to the new regimen to overcome the recurrent moderate elevation of blood glucose readings and the modified regimen proved valid for her controlling the blood glucose readings and the HbA1C remained below 7. I've also managed several "suspected" patients in a similar manner obtaining similar results though the duration of insulin intake was shorter.

Unfortunately, due to the lack of appropriate medical knowledge provided to the public in the developing countries; diabetes mellitus still has a very bad stigma horrifying millions of type 2 diabetic patients especially when the doctors decide to prescribe insulin injections. Though it's well known that insulin should be given temporarily to type 2 patients like those prepared for major operations or suffering from infections, some doctors readily prescribe insulin to type 2 diabetic patients immediately after they notice elevation of blood glucose readings and most doctors don't reconsider their decision after achieving adequate glycemic control. The patient represented in this case was, most probably, suffering from an acute insulin resistance caused by stress hormones and proinflammatory cytokines [1]. Additionally, she's experienced many of the deleterious dietary and emotional stressors encountered in the modern way of life [2] and the psychological stress was also shown to alter hepatic responsiveness to insulin and affect whole-body glucose metabolism [3].

From my point of view as well as my clinical experience, I recommend to carefully monitor every type 2 diabetic patient who is switched to insulin injections and I believe many of them may return back to oral hypoglycemic drugs and it's better to suspect early and manage properly.

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