16 year male, with type 1 diabetes mellitus for last 6 years was admitted because of Diabetic Ketoacidosis (DKA). Despite having good insulin compliance, he had lost 4 Kg over last 5 months and had HbA1c of 11.3 % at admission. On examination, he was found to have abdominal lipohypertrophy where he had been persistently injecting insulin. Injecting insulin at different sites dramatically improved blood glucose control after he was out of DKA.

Insulin injections can cause a variety of subcutaneous changes, particularly if patients do not rotate sites. This includes lipohypertrophy, lipoatrophy, and rarely infections. Extensive use of human insulin has reduced the prevalence of lipoatrophy but lipohypertrophy remains a significant clinical problem occurring in 27–48% of patients. Lipohypertrophy can lead to erratic insulin absorption and is unsightly.

References