content effects in T2DP with either randomly pump or MDI treatment. Results. In 13 T2DP, we found no significant modifications in terms of weight and insulin doses, neither in liver fat content using spectroscopy RMN; there was a tendency to a better metabolic control in the group pump (N=8) compared to MDI (N=5), p=0.09. AUC over 180 mg/dl/day was significantly lower in the pump group versus MDI, p=0.05. In each group during CGM registration, the difference in glycaemic variability between baseline and 6 months was significantly lower in the pump group compared with the MDI group p=0.03. Unexpected, T2DP treated with pumps less modified plasma glucagon values than patients treated with MDI, p=0.018. Conclusions. Because of a too small number of patients in each group, more significant results could not be demonstrated. Nevertheless, AUC over 180 mg/dl/day was significantly lower in the pump group versus MDI; interesting, difference between baseline and 6 months in the two groups regarding plasma glucagon values was higher in T2DP treated with MDI. May be the meaning of this result needs to be lightening with the new biology of glucagon.

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Insulin Pumps

ATTD19-0387
USE OF CONTINUOUS SUBCUTANEOUS INSULIN INFUSION FOR MANAGEMENT OF DELAYED HYPERSENSITIVITY REACTION TO INSULIN
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A 15 year old boy with type 1 diabetes mellitus developed delayed hypersensitivity reactions to multiple different insulin formulations. In the days following injection of subcutaneous insulin, he developed localised erythema, abscess formation and ulceration at each injection site with insulins Novorapid, Humolog, Protaphane, Levemir and Lantus. A less severe reaction occurred with Actrapid and Apidra. When assessing the excipients, it was noted that unlike all the other insulin formulations, Apidra does not contain zinc compounds.

Skin biopsy detected mixed inflammatory infiltrate. Patch testing was inconclusive and intradermal testing was pursued. Unfortunately intradermal testing was also inconclusive to a specific allergen, but does not exclude T cell mediated (delayed hypersensitivity) pathology.

The decision was made to commence the patient on an insulin pump with subcutaneous infusion of Apidra via a desensitisation protocol. During inpatient admission, intravenous Actrapid infusion was commenced and all subcutaneous insulin ceased. Apidra was infused in a gradually increasing dose from 0.025 units/hour to full basal requirement over 48 hours.

This case demonstrates the use of insulin pumps for management of patients with insulin allergy and the successful use of an insulin desensitisation protocol.

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Insulin Pumps

ATTD19-0396
BASEL RATES DELIVERED ACCORDING TO TYPICAL CIRCADIAN PROFILES WITH BOLUSES: ACCURACY OF DIFFERENT INSULIN PUMPS
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Background and Aims: Insulin pumps are commonly used in the therapy of persons with type 1 diabetes. EN 60601-2-24