

LIPOHYPERTROPHY IN CSII* PATIENTS AND ITS RELATIONSHIP TO KEY CLINICAL PARAMETERS

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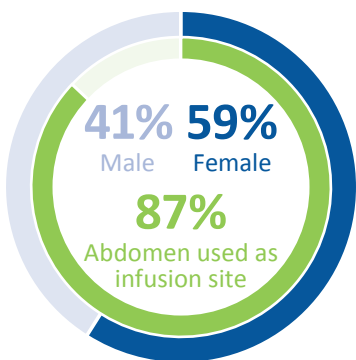
INTRODUCTION:

Lipohypertrophy (LH) is found in up to half of insulin injecting patients and is associated with higher HbA1c, higher total daily doses (TDD) and more frequent hypoglycaemia and glycaemic variability. However little is known about the prevalence of LH in CSII patients or its clinical significance.

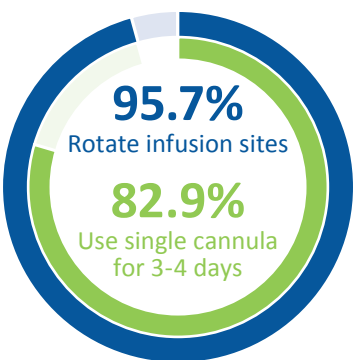
METHODS:

We assessed for LH in 70 CSII patients and analysed its impact on key clinical parameters.

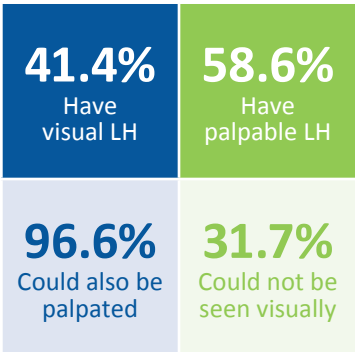
RESULTS:



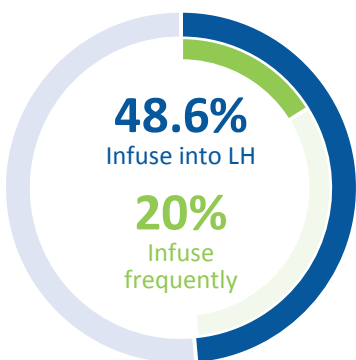
Patients were 59% female, all but 1 had type 1 DM and 87% used the abdomen as infusion site.



95.7% of patients claim to rotate their infusion sites with each new cannula and 82.9% of patients use a single cannula for 3-4 days.

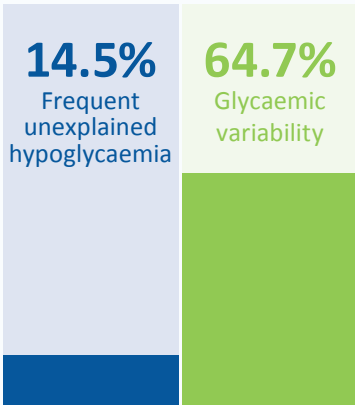


41.4% were found to have visual LH and 58.6%, palpable LH. 96.6% of the visible LH could also be palpated but 31.7% of the palpable LH could not be seen visually. The mean size of abdominal LH was 29.9mm.



48.6% of patients infuse into lipohypertrophy, 20% frequently i.e. once per week.

14.5% of patients had frequent unexplained hypoglycaemia and 64.7% glycaemic variability but neither was associated with the presence of LH or infusion into LH. We also did not find a relationship between LH and HbA1c, TDD or DKA.



DISCUSSION:

LH is present in nearly 3 out of 5 CSII patients and palpation picks up more LH than visualization alone. In our CSII patients LH is not related to HbA1c, TDD, hypoglycaemia, glycaemic variability or DKA, suggesting that the mechanism and clinical implications in CSII patients may differ from those in insulin injectors.

*Continuous Subcutaneous Insulin Infusion