

- Complete this form and return as an email attachment
- Your abstract will be anonymously reviewed by four persons and you will receive confirmation of acceptance/non-acceptance by 1 August 2017.

Send this form to:

magdalena.annersten@mail.com

To be received by 1 July 2017

Name: Daria Roca Espino

Professional address: Villarroel, 170 08036 Barcelona / Spain

Work Phone: +00 34 932279846

Work Fax: 934516638

Email address: droca@clinic.cat

TITLE:
(block letters)

Authors:
(surname initials, qual, title if other than nurse), institution, town, country.

Text
(Background: Aim: Method: Result: Conclusion:)

Word count = 350 max including title

IMPACT ON GLYCAEMIC CONTROL OF A THERAPEUTIC EDUCATIONAL PROGRAMME TO OPTIMIZE INSULIN PUMP TREATMENT IN TYPE 1 DIABETES

Roca D, Boswell L, MD, Jansà M, PhD, Vidal M, Viñals C, MD, Giménez M, MD, PhD, Quirós C, MD, Conget I, MD, PhD.

Diabetes Unit, Endocrinology and Nutrition Service. ICMDiM. Hospital Clínic.

BACKGROUND: Around 30-40% of type 1 diabetes patients (T1D) initiating continuous subcutaneous insulin infusion (CSII) due to poor metabolic control cannot maintain the short/medium term improvement obtained over the long term.

AIMS: To determine the impact on metabolic control of a therapeutic educational programme (TEP) in T1D patients on CSII (TEP-CSII-Optimization) and analyse the difficulties/barriers for optimizing control.

METHODS: T1D patients on CSII >5 years with HbA_{1c}>8% were included. TEP-CSII-Optimization included 4 visits: on a weekly basis during the first month in a 4-patient group (2h/session). An interdisciplinary team evaluated the difficulties/barriers and improvement proposals to achieve optimum control. The topics identified and the specific knowledge and skills for CSII treatment self-management were assessed. Specific technological support allowed personalized schedules and modification algorithms. The variables studied were: demographic, T1D duration and time with CSII, reasons for initiation of CSII and the TEP-CSII-Optimization programme, metabolic control, perception of hypoglycaemia (Clarke test), T1D knowledge (DKQ2 questionnaire) and quality of life (DQoL questionnaire). The parameters were evaluated at 6 months.

RESULTS: 22 patients were included (63% women, age 49±13 years); T1D duration: 25.4±9.2y; time on CSII: 8.7±3.7y; Reasons for CSII initiation: poor control (77%), severe/frequent hypoglycaemias (5%) and both (18%). Reasons for inclusion in TEP-CSII-Optimization: poor control (57%), severe/frequent hypoglycaemia (19%) and both (24%); baseline HbA_{1c} 8.4±0.65%. Two patients had presented severe hypoglycaemias in the previous 2 years. 21% had impaired hypoglycaemia awareness (Clarke >4R). T1D knowledge: 29±4 (maximum DKQ2 score 35). DQoL: satisfaction 35.5; impact 30.6; social concern 3.2; T1D concern 8.3. The most frequent difficulties/barriers identified were: insecurity with algorithms; carbohydrate meal calculations; lack of adherence to downloading data for analysis; lack of adaptation to physical exercise. At 6 months HbA_{1c} improved by -0.5% (7.9±0.58%, p=0.014). The level of knowledge (p=0.12) and the perception of hypoglycaemia (p>0.05) did not change. The QoL satisfaction scale significantly improved (p=0.047).

CONCLUSIONS: The TEP-CSII-Optimization programme is effective for short-term improvement in T1D patients with poor glycaemic control on CSII. The difficulties/barriers identified allowed proposals for programme improvement.