

CSII in MDT2: "real life" data from a multicentric retrospective analysis

G. Grassi¹, A. Girelli², E. Guastamacchia³, P. Massucco⁴, F. Tassone⁵, G. Tonolo⁶, C. Tubili⁷, E. Zarra⁸

INTRODUCTION

Continuous subcutaneous insulin infusion (CSII) therapy is known to be an effective and safe way of treatment for patients affected by type 1 diabetes. Recent evidence suggests it might have a role in type 2 patients too, permitting a good glycemic control. Moreover, CSII may offer some potential advantages in comparison to multiple daily injections (MDI), which have been poorly investigated in type 2 diabetes (T2DM). Randomized controlled trials^{1,2} and a systematic review³ recently published are highlighting the role of CSII for T2DM. However, results obtained in clinical trials sometimes differ from the real-life experience. Aim of our retrospective study was to analyze the clinical outcome of CSII in patients with T2DM2 in a real-life setting.

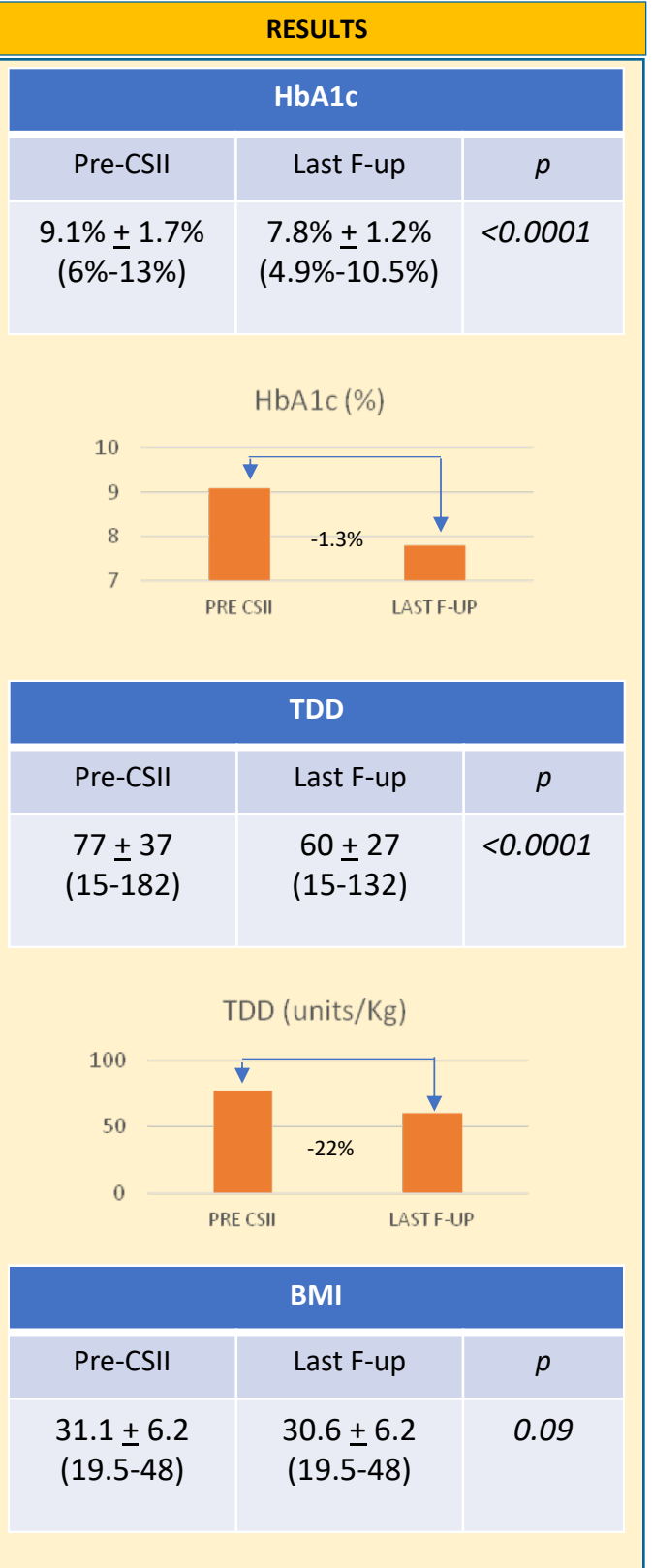
MATERIALS AND METHODS

Seven Italian Diabetological centers collected data on **50 adult T2DM** already using CSII. Clinical data at diabetes onset, at MDI, at CSII starting and at the last follow-up were collected,. They included population data, metabolic control, total daily insulin dose (TDD), body mass index (BMI) and any complications of diabetic disease.

When CSII therapy was started, population was characterized by:

- **Mean age: 58.1 + 9.5 years**
- **Male 30 (60%)**
- **Duration of diabetes: 17.1 + 9.1 years**
- **Duration of MDI treatment: 4.5 + 5.1 years**

The mean CSII follow-up was 5.98 + 4.5 years. Seven patients suspended CSII, 2 patients were lost to follow-up and 2 patients died for causes not directly related to diabetic disease.



CONCLUSIONS

Our multicenter real life experience confirms the results already published in literature: a significant reduction of Hba1c and TDD was observed after a mean of 6 years of CSII treatment in T2DM. In order to spread the clinical usage of the therapy more cost-effectiveness evidences are needed.

References

1) Wainstein J, Metzger M, Boaz M, et al. Insulin pump therapy vs. multiple daily injections in obese Type 2 diabetic patients. Diabet Med. 2005; 22(8):1037-46

2) Reznik Y, et al. Insulin pump treatment compared with multiple daily injections for treatment of type 2 diabetes (Opt2mise): a randomised open-label controlled trial. Lancet 2014; 384: 1265–72

3) Pickup JC et al. Glycemic Control During Continuous Subcutaneous Insulin Infusion Versus Multiple Daily Insulin Injections in Type 2 Diabetes: Individual Patient Data Meta-analysis and Meta-regression of Randomized Controlled Trials.Diabetes Care 2017;40:715–722 | DOI: 10.2337/dc16-2201

¹Citta della salute e della Scienza, Endocrinology, Torino, ²Spedali Civili- Brescia, UO Diabetologia, Brescia, ³Univ. "Aldo Moro" Bari, Dip. Medicina, Bari, ⁴AOU San Luigi Orbassano (TO) Malattie del Metabolismo ⁵A.S.O. S.Croce e Carle, Div. Endocrinologia- Diabete e Metabolismo, Cuneo, ⁶ATS SARDEGNA-ASSL Olbia, SC Diabetologia, Olbia, ⁷AO S.Camillo - Forlanini, UOSD Diabetologia, Roma, ⁸Spedali Civili, UO Diabetologia, Brescia, **Italy**