

Glycemic control improves in patients with diabetes type 1 after transition from pediatric to adult care

Ivana Kraljevic, Maja Baretic, Ivana Pavlic Renar

Department of Endocrinology, University Hospital Center Zagreb, Croatia



OBJECTIVES

The aim of the study was to compare HbA1c levels in patients with type 1 diabetes before and 3 months after the transition from pediatric to adult endocrinology clinic.

METHODS

Retrospective analysis of the data from 88 young adults with type 1 diabetes was done. The consecutive patients were recruited in their last year of pediatric care and then transferred to the adult endocrinologist care. A group of 25 randomly chosen patients underwent structured 5-days educational program through group classes while 63 patients underwent usual care. We compared glycemic control using HbA1c levels before and 3 months after the transition in both groups.

Graph 1. HbA1c before and after transition (N=88)

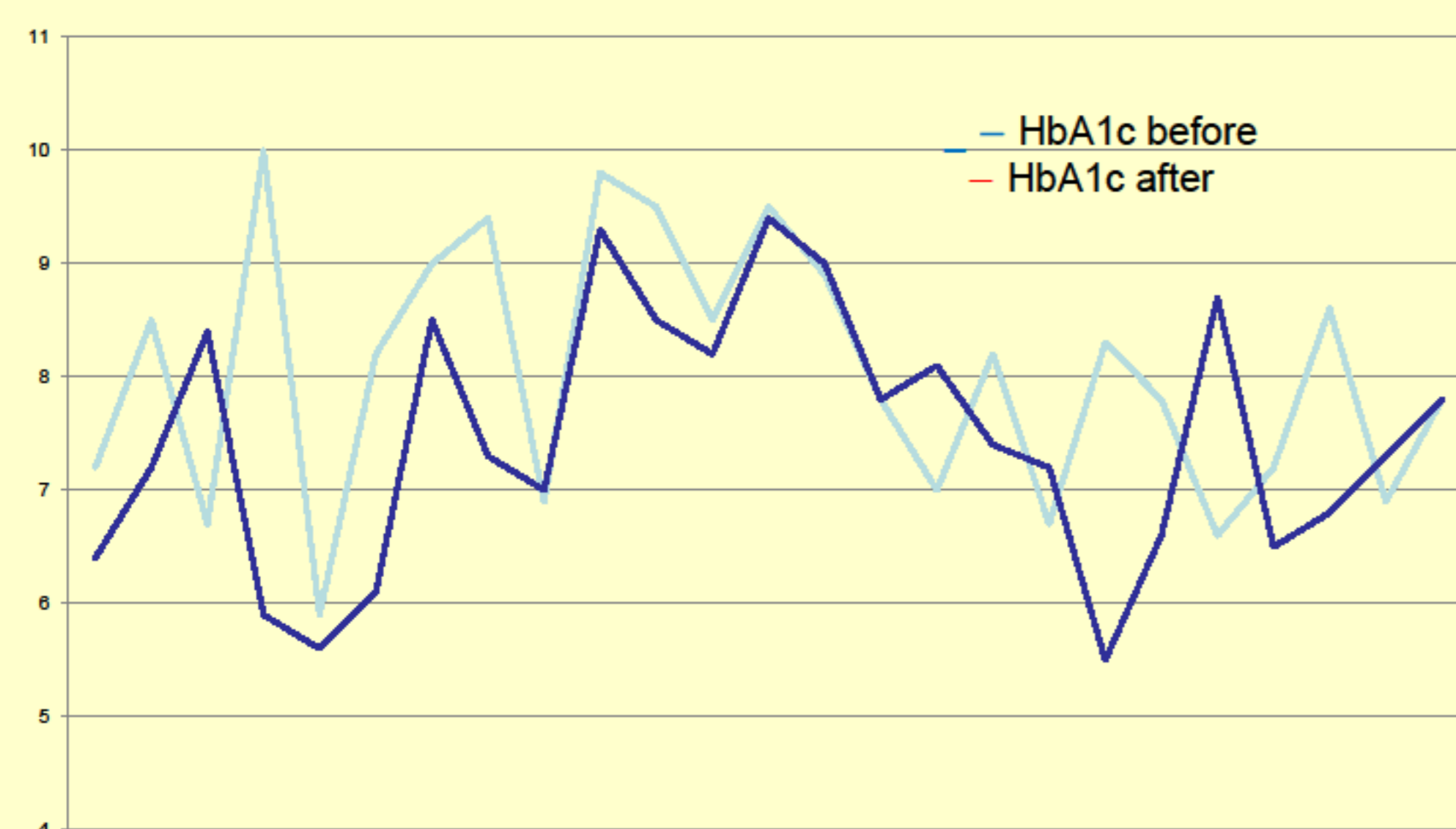


Table 1. Age and HbA1c before and after transition

	Usual care group	Structured education group	All
N	63	25	88
Age	26(17-42)	25(18-41)	25(17-42)
HbA1c before (%)	7.2(5.3-11.4)	8.2(5.9-10)	7.5(5.3-11.4)
HbA1c after (%)	7.3(5-10.8)	7.3(5.5-9.4)*	7.3(5-10.8)*

Data are presented as median(range)
*HbA1c before vs. HbA1c after p=0.036

RESULTS

Median age of participants was 25 (17-42) years. Median HbA1c level at the time of transition was 7.5 % (5.3-11.4). After 3 months median HbA1c of the whole group was 7.3 % (5-10.8), p=0.036. Two subgroups of patients did not differ in age, HbA1c levels before (7,2 % (5,3-11,4) vs. 8,2 %(5,9-10), p=0,184) and three months after transition (7,3(5-10,8) vs. 7,3(5,5-9,4), p=0,587). Nevertheless, patients in the group with structured educational program had significant improvement in glycemic control 3 months after the transition (8,2 % (5,9-10) vs. 7,3(5,5-9,4), p=0,036), while the other group with usual care did not improve the HbA1c level significantly. The data are presented in Table 1. and Graph 1.

CONCLUSIONS

Structured educational program significantly improves the glycemic control in patients with type 1 diabetes in transition period.

