

# The effectiveness of pregnant women with type 1 diabetes mellitus management with continuous subcutaneous insulin infusion

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**Aim:** assess the effectiveness of management of pregnant women with type 1 diabetes mellitus (DM 1) with continuous subcutaneous insulin infusion (CSII)

**Materials and Methods:** Pregnant women with DM 1 with CSII (n = 21) - the main group and on multiple daily insulin injections (MDI) (n = 216) - the comparison group. We used different models of the Medtronic pumps. The inclusion in the comparison group carried out by a continuous method. The term of delivery, the frequency of preeclampsia, the level of glycated hemoglobin (HbA1c) in the 3rd trimester were used as efficiency criteria.

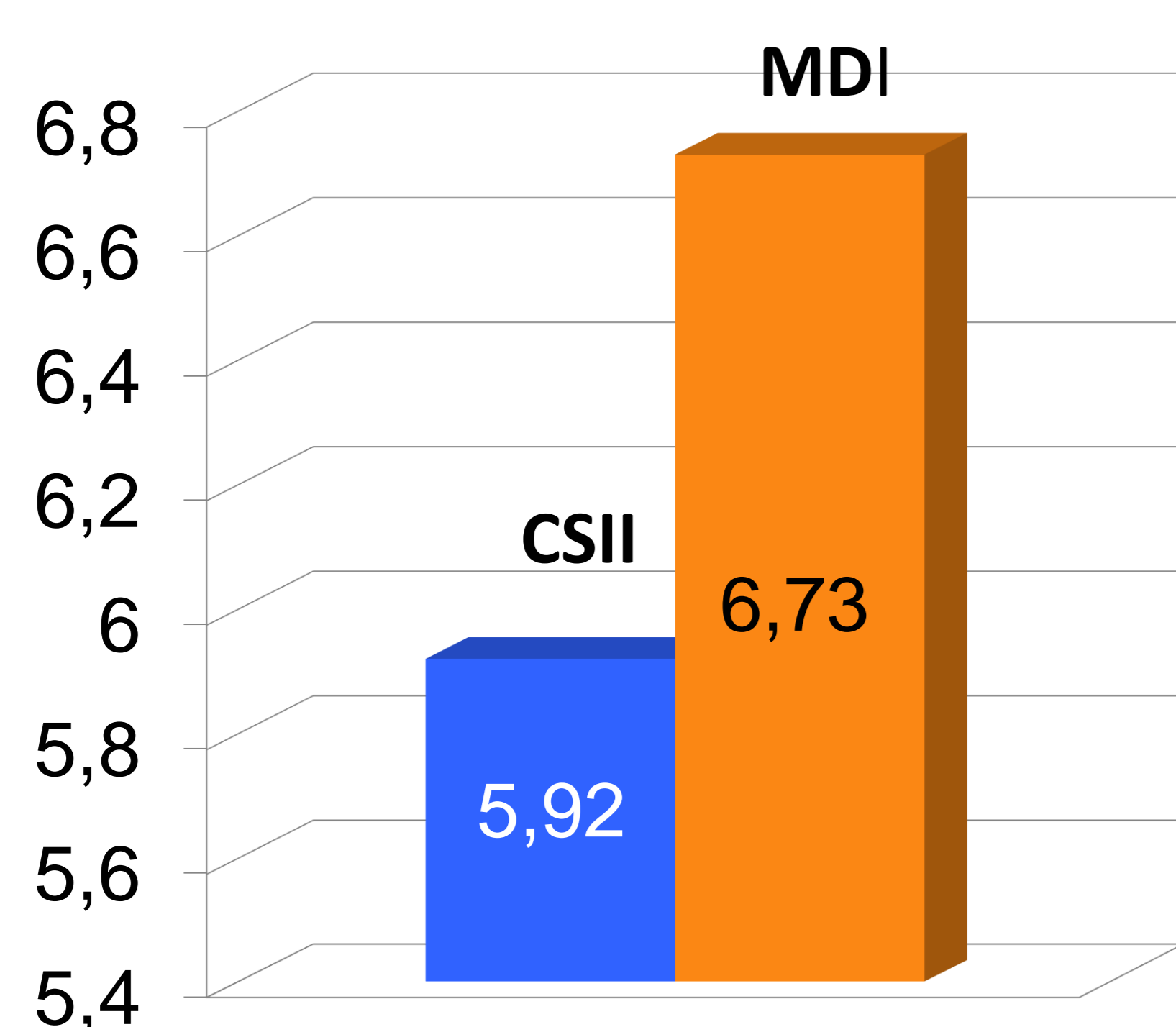
**Results:** In the main group, premature delivery was only 9,5%, compared with 53,7% in the group of MDI . The incidence of preeclampsia in the main group was significantly lower and amounted to 19,1%, compared with 52,8% in the comparison group. Also, the level of HbA1c in the third trimester in the main group were significantly less than in the comparison group and amounted to 5,92%, in comparison with 6,73%.

	CSII	MDI
Preterm delivery n, %	2 (9,5%)	116 (53,7%)*
Preeclampsia n, %	4 (19,1%)	114 (52,8%)*
The average HbA1c in the 3rd tr.,%	5,92%	6,73%*

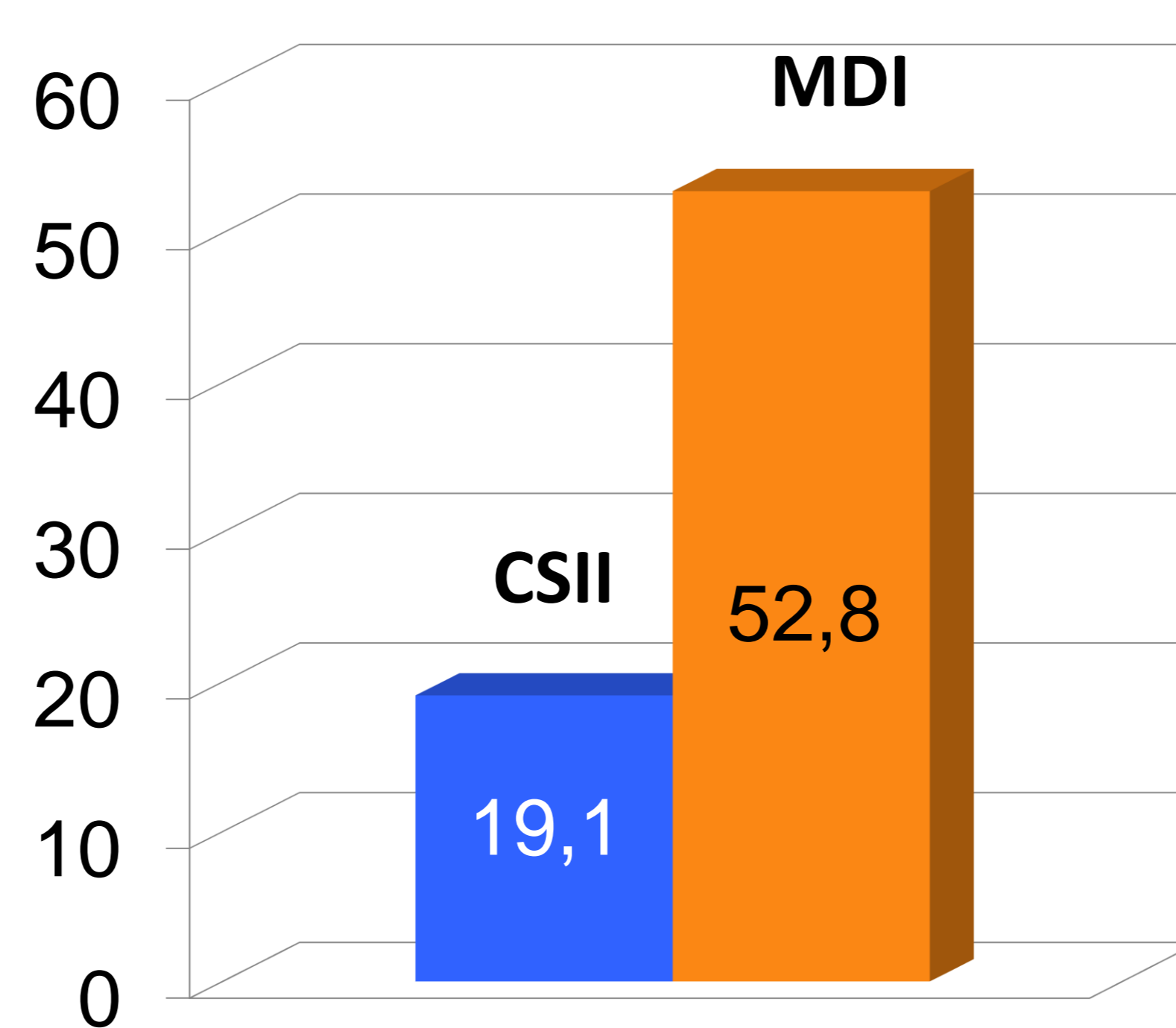
(\* - the difference were significant, p<0,05)



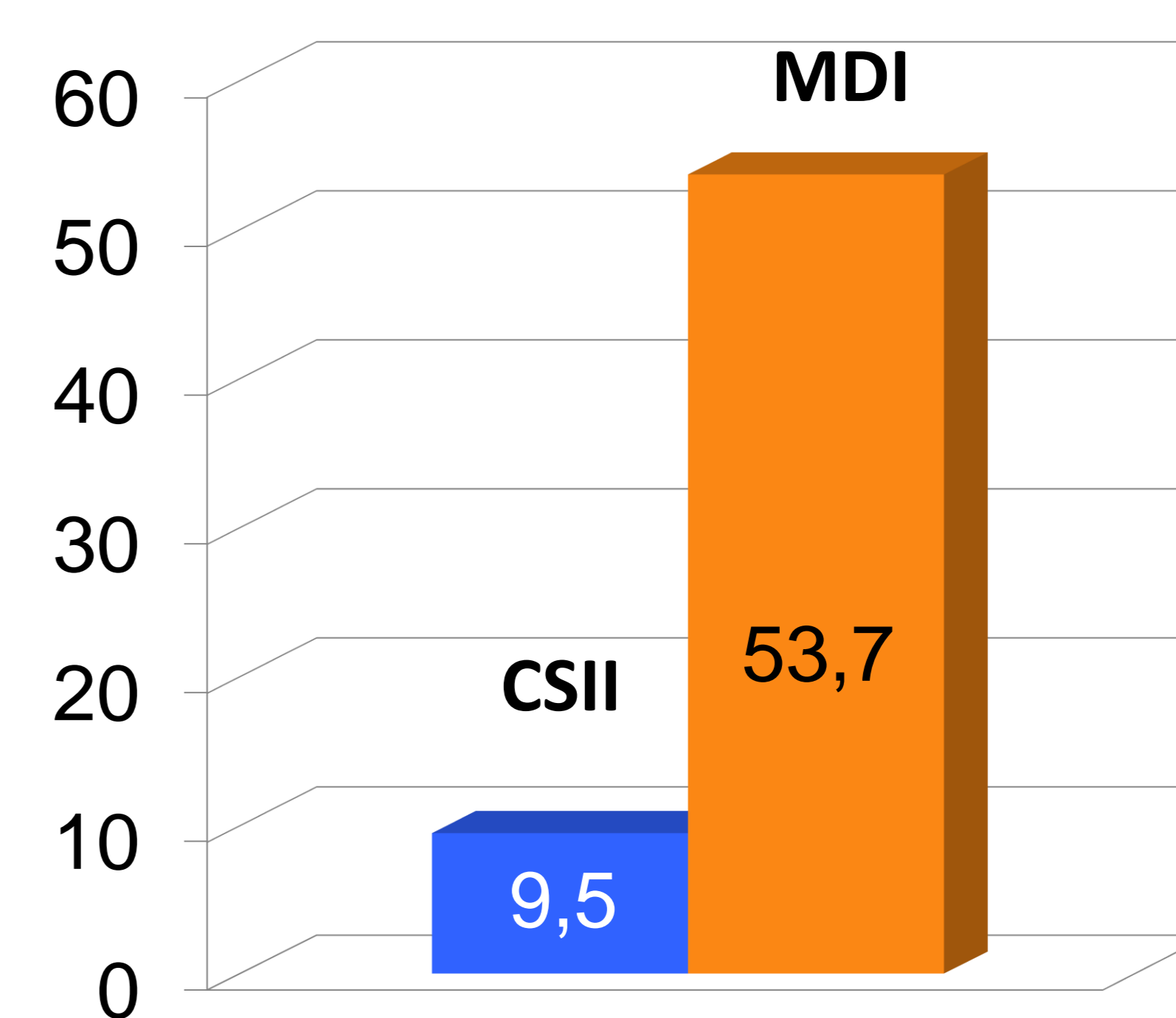
CSII - continuous subcutaneous insulin infusion, MDI - multiple daily insulin injections



The average HbA1c in the 3rd tr.,%



Preeclampsia,%



Preterm delivery, %

**Conclusions:** The continuous subcutaneous insulin infusion is an effective method of management of pregnant women with type 1 diabetes, which allows obtaining a full-term child in 90% of cases against the background of the optimal state of carbohydrate metabolism, reducing the frequency of preeclampsia.