Objective: Initiation of continuous subcutaneous insulin therapy (CSII) requires an appropriate basal rate profile. Although different approaches exist; there is a lack of evidence-based recommendations, especially in young children.

Aim: To show how % of basal rates change at the end of first year of therapy when basal rates were equally distributed at the start of therapy

Materials and Methods: Basal insulin requirement and diurnal distribution of 129 CSII patients were analyzed at the initiation of pump therapy and in the first year. Patients were divided into four age groups:
- <5 yr (n = 27),
- 5 to < 8 yr (n = 20),
- 8 to <12 yr (n=33), 12 to <15 yr (n = 28),
- 15 to < 18 yr (n=16) and >18 yr (n = 5)

RESULTS;
129 cases; (Figure 1)
- Age: 14.7 ± 5.7 year
- Age of onset of IPT: 9.7 ± 5.0 years
- Diabetes duration: 8.2 ± 3.6 years

According to age groups, daily insulin requirement (U/kg) was different (Table 1).
- Basal insulin requirement (%) did not differ between the beginning of therapy and first year except in the group 8 to 12 yrs (Figure 2).
- In every age group basal insulin (U/kg) circadian insulin profiles were different except in the group 15 to<18 yr and >18 yrs. (Figure 3)

As a result, at the start of pump therapy basal rates should be designed according to circadian rhythm.