

Insulin Pump Satisfaction in Pediatrics

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Background

Insulin pump therapy or Continuous Subcutaneous Insulin Infusion (CSII) offers many benefits for pediatric patients living with Type 1 Diabetes Mellitus (T1DM) including potential improvement of Hemoglobin A1C, flexibility with physical activity and exercise, prevention of fluctuation of blood glucose levels and improvement of quality of life. CSII use can be effective in very young children, competitive athletes, children with needle phobia and children with severe fluctuation of blood glucose levels.

Method

•We surveyed 30 families who have children with T1DM utilizing CSII during a regular follow up clinic visit. The project was approved by the Institutional Review Board in our university

Results

- Sixty three percent of the children using CSII were between the age of 13 and 18 years. Fifty six percent of the total patients had the CSII for more than 5 years.
- All of the families felt that CSII gave their children more flexibility in their lives, made managing diabetes easier and reported that they would recommend it to other families with children with diabetes. We didn't evaluate HbA1C improvement but 87 % of the families believed that CSII improved the HbA1C.
- The frequency of reported problems in 1 year using CSII was: diabetes ketoacidosis episodes 23%, pump failure 60% and severe hypoglycemia 13%

Conclusion

- CSII offers a great satisfaction rate among pediatric patients with T1DM and their families. The best areas of satisfaction are related to improving flexibility in lifestyle.
- This small survey confirms the reported satisfaction in the medical literature that patients and families get from CSII use.