## Study of association between Vitamin D levels and $HbA_1C$ levels in children with diabetes mellitus type 1.

Dr. Anuya Chauhan<sup>1</sup>, Dr. Gargi Pathak<sup>2</sup>, Dr. Shefali Gupta<sup>3\*</sup>

## Abstract:

**Aims and Objectives:** To evaluate the association between diabetes mellitus type 1(T1DM) and vitamin D deficiency, to compare vitamin D deficiency and glycemic control in paediatric patients with diabetes. **Materials and Methods:** It's a cross-sectional study done at civil hospital, Ahmedabad over a period of 10 months from October 2016 to July 2017. A total of 45 patients having DM type 1 in age groups between 1 to 12 years of age were included in the study. Vitamin D and HbA<sub>1</sub>C levels were done in all the patients. Patients with malnutrition, liver disease and end stage renal disease were excluded from the study. **Results:** The incidence of vitamin D deficiency in 75.5% among patients with T1DM. 59% of the vitamin D deficient group showed poor control with HbA<sub>1</sub>C levels >9%.

Key words: Cholecalciferol, Diabetes mellitus type 1, Ergocalciferol, HbA<sub>1</sub>C.

## Authors:-

<sup>1</sup>Assistant professor, <sup>2</sup>Proffesor, <sup>3</sup>Third year resident, Department of Paediatrics, Civil Hospital, Ahmedabad.

## \* Corresponding Author:-

Dr. Shefali Gupta E-mail:- <u>guptashefali1989@gmail.com</u>