

Angeles.⁵⁻⁹ Nevertheless, the Variant II Turbo 2.0 (Bio-Rad Laboratories, Hercules, CA), our assay method for HbA1c since 2011, do not show any clinically significant interference in the presence of Hb D-Los Angeles trait.¹⁰

In conclusion, to avoid reporting inaccurate results, laboratories should be aware of the limitations of their methods with respect to hemoglobin variants, and indicate this information in reports to physicians. On the other hand, physicians should consider the possibility of interference by an hemoglobin variant if a patient's HbA1c results is significantly different from what is expected on the basis of blood glucose self-monitoring.

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Cataract: A forgotten early complication of diabetes in children and adolescents[☆]



Catarata: una complicación precoz olvidada de la diabetes en la infancia y adolescencia

Cataract, defined as opacification of the lens, is one of the most common conditions in aging individuals. There are two types of cataract depending on its location, nuclear and sub-cortical or capsular. Diabetes mellitus accounts for a fifth of all cataracts, increasing two- to five-fold the prevalence of subcortical cataract in patients of any age, and up to 20 times in patients under 40 years of age.¹ Opacification results from the osmotic effect of excess sorbitol generated by hyperglycemia, and the greater the duration and severity of hyperglycemia, the sooner the opacification.¹

Our objective is to report two cases of cataract in children with type 1 diabetes mellitus, and to remind the existence of this significant complication, even at a pediatric age, to allow for early diagnosis and treatment.

The first patient was a 12-year-old prepubertal boy with diabetes diagnosed 10 years before and with a very poor metabolic control. Patient attended the hospital very infrequently, almost only when he experienced episodes of ketoacidosis caused by discontinuation of insulin therapy, and his glycosylated hemoglobin (HbA1c) levels were approximately 14% (the criterion for good diabetes control in childhood and adolescence is an HbA1c value of 7.5% or less).^{2,3} The second patient was a 13-year-old girl diagnosed with diabetes 6 months before with complete pubertal development and menarche at 11 years. At cataract diagnosis, the patient was in the “honeymoon” phase (insulin requirement, 0.2 U/kg/day) with an optimum metabolic control (HbA1c values, 5.7% and 5.9%). The only hyperglycemia period in her history was the one occurring before diagnosis, as she reported cardinal clinical signs for approximately six months before insulin therapy was started, and baseline HbA1c was 14.5%.

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The first patient was referred to ophthalmology because of poor diabetes control on the occasion of an admission for ketoacidosis, while the second patient visited a private ophthalmologist on her own initiative with no visual symptoms. In both patients, ophthalmological examination revealed a posterior, diffuse subcortical cataract with a "snowflake" image. In the first patient, the ophthalmological complication led to an improved adherence to diabetes treatment, which decreased HbA1c levels to 7.5–8.5% in the subsequent two years. Cataract progression stabilized, but the condition has not been surgically treated yet. The second patient underwent surgery with no complications.

Cataract occurring in children and adolescents with type 1 diabetes mellitus at an early stage (either at diabetes onset or after only a few years of very poor metabolic control) is called "acute cataract", "metabolic cataract", "true diabetic cataract" and, because of its typical image, "snowflake" cataract.¹ There are reports in the literature of some cases occurring in children and adolescents^{4–10} as early as at five years of age.⁷

Cataract is the result of severe, long-standing hyperglycemia due to a sustained poor metabolic control^{4,5} or occurring before diagnosis. Cataract has been shown to be related to initial HbA1c levels higher than 12.8%⁸ and to a prior period with cardinal symptoms longer than 6 months,⁹ scenarios which agree with those of our patients. Surgery is usually required, but there have been reports of patients where the condition has been reversed after achieving a good glycemic control.¹⁰

Cataract is so exceptional in children that it is not mentioned in the guidelines of the American Diabetes Association (ADA),² while the International Society for Pediatric and Adolescent Diabetes (ISPAD) makes a low grade recommendation, "E", suggesting "that an ophthalmological examination should be considered at diagnosis of diabetes to detect cataract and refraction disorders".³

Although this is a rare comorbidity, children and adolescents with diabetes should be monitored for cataract, especially if they have had periods of severe, prolonged hyperglycemia, both before and after diagnosis, regardless of age and lack of pubertal development.

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Impact of calcimimetics in surgery of secondary hyperparathyroidism[☆]



Impacto de los calcimiméticos en la cirugía del hiperparatiroidismo secundario

Secondary hyperparathyroidism (SHPT) affects approximately 100% of patients on a dialysis program. Almost 90% are controlled with conservative treatment, while the rest

require more aggressive treatment for control. Surgery has traditionally been the treatment of choice for these difficult to control cases.^{1,2} Since 2005, when the calcimimetic cinacalcet was approved by the European Medicines Agency, therapeutic management of SHPT has gradually changed. Cinacalcet has progressively become the first treatment option for patients with difficult to control SHPT. There is however little information as to whether this has had a real long term impact on the need for surgery in patients with difficult to control SHPT.^{3–5} The study objective was to analyze the impact of cinacalcet on surgery for SHPT at our hospital after 10 years of use.

The study population consisted of patients with chronic kidney failure on a dialysis program who had undergone surgery for SHPT from January 1995 to December 2014. Patients with prior thyroid and/or parathyroid surgery, and

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