from Argentina. The variable phenotype of patients with GLI2 mutations worldwide could be caused by variation in other genes, environmental exposures, maternal effects, and/or epigenetic factors.

Healthcare Delivery and Education

EXPANDING CLINICAL CONSIDERATIONS FOR PATIENT TESTING AND CARE

Reducing Unnecessary Repeat HbA1c Testing in a Tertiary Academic Hospital

Vamana Rajeswaran, MD[1], Lisa Alexander, MD[1], Raad Alwithenani, MD[1], Diana Jaskolka, MD[1], Shirine Usmani, MD[1], Susan Tran, MD[1], Sarah Khan, MD[1], Paul Yip, PhD, FCACB, DABCC[2], Geetha Mukerji, MD, MSC, FRCPC[3].
[1]University of Toronto, Toronto, ON, Canada, [2]Sunnybrook Health Sciences Centre, Toronto, ON, Canada, [3]University of Toronto, Women's College Hospital, Toronto, ON, Canada.

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Background

Glycated hemoglobin (HbA1c) is a surrogate marker of glycemia over the preceding three months, where the last 30 days contributes to 50% of the value (1). Therefore guidelines often recommend repeating HbA1c only after 3 months in most situations (2), but repeat testing of HbA1c is often conducted earlier when not warranted (3). We aimed to conduct a Quality Improvement (QI) initiative to reduce unnecessary repeat testing of HbA1c at a large tertiary care academic hospital in Toronto, Ontario by 50% by May 2020.

Methods:

The Model for Improvement Quality Improvement (QI) framework was used in the design of the QI project to reduce repeat HbA1c. Problem characterization was conducted to understand root causes and iterative Plan-Do-Study-Act cycles were used to develop a change intervention. Unnecessary HbA1c tests were the primary outcome and defined as repeat HbA1c testing within 60 days; the top three specialities that ordered unnecessary HbA1c tests were targeted for education prior to implementation of the change intervention.

Results:

Baseline data on all HbA1c tests in 2018 revealed repeat testing in approximately 10% of 15,290 HbA1c tests, with estimated potential savings of more than $11,000 based on the provincial reimbursement rate. The top 3 ordering specialities targeted for education included Nephrology (n=410 repeat HbA1c tests), Cardiology (n=246 repeat HbA1c tests), and Endocrinology (n=136 repeat HbA1C tests). Root cause analysis revealed that providers often ordered repeat HbA1c tests due to being unaware of prior results and a knowledge gap of testing recommendations. A laboratory forced function will be implemented on December 1, 2019 to cancel any repeat HbA1c tests within 60 days and calls to the lab to add HbA1c testing will be tracked.

Conclusions:

Repeat HbA1c testing is frequent in hospital settings and can be an important target for QI efforts. A forced function to cancel processing of repeat HbA1c may be an appropriate QI intervention to reduce repeat testing to promote high-value care. Ongoing data analysis will be conducted to assess the impact of this intervention.

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Neuroendocrinology and Pituitary

PITUITARY TUMORS II

Clinical Features in Patients with Hypercorticism

Gulzoda Shuhratovna Negmatova, PhD, Rukhangiz Utkurovna Norshodieva, PhD, Umida Akmalovna Mirsaidova, PhD.
Center of Endocrinology, Tashkent, Uzbekistan.

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Clinical Features in Patients with Hypercorticism.

Cushing's disease is a severe multimorbid pathology affecting mainly people of young working age. In most cases, the diagnosis of the disease is acute and the patient is observed for a long time by doctors of different specialties with complications of hypercorticism.

Purpose: To identify the most frequent clinical manifestations of hypercorticism at the time of diagnosis of Cushing's disease, to analyze the relationship of clinical manifestations of hypercorticism with the main clinical and laboratory indicators.

Material and methods: 25 patients were examined, including 15 women and 10 men with Cushing's disease, registered in Samarkand Endocrinology Clinic.

Results: Majority of patients (68%) were in age 25-40, the average age was 37. The median duration of the disease was 35,5 months. Matronism, the most characteristic manifestation of hypercortisolism was observed in 36% (9 patients). This is most often associated with hypercorticism symptoms were striae and acne, which were found in 56% (14 patients), osteoporosis 40% (10). The most frequent complaints were weight gain, fatigue, headache, menstrual disturbances. A number of symptoms had a positive correlation with cortisol levels.

Conclusion: Clinical manifestations of hypercorticolism are mainly nonspecific. Striae and acne were found in high frequency. Therefore these key features, namely a change in facial appearance, weight gain, elevation of BMI and the presence of genital virilisation should alert the clinician to the possibility of Cushing's disease and initiate laboratory evaluation.