EP58

JOINT3982

Incidentaloma: pathological and biochemical analysis management in the disorders of the adrenal medulla in albania popullation

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Background & Aim
The adrenal incidentaloma is an adrenal tumor discovered by an imaging test that is being done for a control by that is not related to adrenal disease. Pheochromocytoma is a rare tumor that develops in the adrenal medulla, the inner part of the adrenal glands. This tumor leads to the excessive release of catecholamines, resulting in symptoms such as rapid heart rate, high blood pressure, anxiety, intense headaches, excessive sweating, and unintentional weight loss.
Methodology
This study studied Incidentaloma patient with the pheochromocytoma. Levels of catecholamines and their byproducts in the blood and urine are measured. The analysis includes measuring plasma-free metanephrines or fractionated metanephrines in urine. Additional tests, such as measuring total urinary metanephrines, plasma or urinary catecholamines, or urinary vanillylmandelic acid (VMA), will be used to confirm the presence of the tumor.
Results
The study was conducted on patients aged 15-98 years old. In this study, the pathological pathologies and imaging images of the patients are going to be analyzed. We detect elevated levels of catecholamines or their byproducts in the blood and urine of patients with pheochromocytoma. The most accurate tests include measuring plasma-free metanephrines or fractionated metanephrines in urine. Additional tests, such as measuring total urinary metanephrines, plasma or urinary catecholamines, or urinary vanillylmandelic acid (VMA), will be used in future steps to confirm the presence of the tumor.
Conclusion & Future Research
This study highlights the diagnostic value of plasma-free metanephrines and fractionated urinary metanephrines as the most accurate tests for detecting the tumor. Elevated levels of catecholamines and their byproducts provide critical evidence for diagnosis, while additional confirmatory tests, including urinary vanillylmandelic acid and total catecholamine measurements, can strengthen diagnostic accuracy. Early and precise diagnosis is essential to prevent life-threatening complications such as hypertensive crises, arrhythmias, or stroke. Future research should focus on refining diagnostic algorithms, and incorporating novel biomarkers.
Keywords
Adrenal Tumors, Catecholamines, Metadrenalines, Phaeochromocytoma, Hypertension
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JOINT2404

Stratification of total cardiovascular risk in young patients with type 1 diabetes mellitus

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Background
Cardiovascular disease (CVD) is a common macrovascular complication of type 1 diabetes (T1D) which still remains the leading cause of death even in well-controlled T1D. Over the last decades young patients with T1D have not shared in the overall reduction of cardiovascular morbidity and mortality but instead according to data from recent epidemiological studies showed a striking increase. Therefore, to improve the prognosis of young patients with T1D targeted primary prevention of CVD is crucial e.g., total cardiovascular risk assessment.
Objectives
Assessment and stratification of total CV risk in young patients with T1D living in Minsk.
Methods
The study was based on a retrospective review of young patients with T1D without previous CVD attending the outpatient clinic "Minsk City Clinical Endocrinological Center". The stratification of CV risk was performed using the Steno T1 Risk Engine (ST1RE). Control group included patients without T1D, for CV risk stratification Framingham risk score was used.
Results
Eighty-eight patients were enrolled (43F, 45M), median age 36 years [IQR 28-41] with onset of T1D 16 [11-25]. Of these, 20,5% (18 patients) had an early onset of T1D 6,5 [5-8,5]. Glycemic control of our young patients with T1D was suboptimal HbA1c – 7,65% [6,7-8,65]. Using the ST1RE algorithm: 23,9% (21 patients) were at high CV risk, 76,1% (67 patients) had moderate and none had low risk. In the control group ($n = 88$): 95% of patients had low CV risk, 5% had moderate CV risk. The frequency of occurrence of moderate risk was statistically higher in patients with T1D when compared to the control group (76,1% vs 5%, $p < 0.01$).
Conclusions
Our study suggests that further preventive interventions based on accurate CVD risk prediction algorithm is required for primary prevention of CVD in young patients with T1D.
Key words
type 1 diabetes, cardiovascular risk, young patients, prevention, Steno-calculator
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JOINT2165

Pituitary adenomas in adult bulgarian CAH patients

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Background
The prevalence of asymptomatic pituitary adenomas varies between 10% and 22%, while clinically relevant pituitary adenomas occur in 1 of 1000 individuals (1). The prevalence of pituitary lesions in patients with congenital adrenal hyperplasia (CAH) is unknown. Therefore, the study aims to present pituitary findings in CAH patients from a single Expert Center for Rare Endocrine Diseases.
Methods
The present retrospective study includes all patients (18-57 years old) with CAH who have been followed-up in the last 15 years. Imaging studies have reported the prevalence and characteristics of the established pituitary formations.
Results
The data of 72 CAH patients (60 women and 12 men) were studied. Ten pituitary lesions (13.9 %) were found, including one Rathke cyst (1.4%), three prolactinomas (4.2%), and six nonfunctioning adenomas (8.3%) in 8 CAH women and 2 CAH men. Additionally, three female cases of "empty sella" were revealed by imaging studies (4.2%). The main indications for MRI in CAH patients were headache, mildly or moderately increased prolactin levels, and increased ACTH levels with suspicion of reactive adenomas. All pituitary adenomas were microadenomas varying between 3 and 7.8 mm. Most pituitary microadenomas (66.7 % [6/9]) were found in women with a late CAH form. No age (27.5 vs. 28 years, $P = 0.530$) or ACTH differences (16.61 vs. 15.05 pmol/l, $P = 0.491$) were found between patients with pituitary lesions and other CAH patients;
Conclusions
Pituitary microadenomas are commonly found in female patients with a late CAH form. Further studies are needed to evaluate the prevalence of different pituitary lesions and their evolution in CAH individuals.
Keywords
CAH, pituitary adenoma, prolactinoma.
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