

Conclusion: Glucose and insulin levels after an OGTT were higher in obese children and adolescents carrying the Hp2-2 phenotype. Furthermore, those carrying the Hp1-1 phenotype had lower LDL-cholesterol levels. Further longitudinal studies are needed to understand if the Hp phenotype is a candidate biomarker of an earlier development of type 2 diabetes and endothelial dysfunction also in children.

PP227 - CUSHING'S SYNDROME CAUSED BY OCULAR CORTICOSTEROID TREATMENT IN AN 8-YEAR-OLD GIRL WITH CORNEAL ANAESTHESIA

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An 8-year-old female patient presented with bilateral corneal anaesthesia, diagnosed because of ocular opacity at 10 months of age. At the age of 7 she underwent three ophthalmologic surgeries: corneal ulcer reparation, keratoplasty, cataract facoemulsification. Since then, she has been treated with corticosteroid eye drops (netilmicin/dexamethasone 3mg/ml/1mg/ml; 1-2 drops 4 times a day in the right eye, 1-2 drops once a day in the left eye).

During the eye drops treatment, dark hairs on her limbs, forehead, fingers and trunk, weight gain, reduction of growth velocity and face changes gradually appeared; psychomotor development was normal. At the physical examination, the girl's height was in the 20°-50° percentile, the BMI in the 90°-95° percentile; blood pressure was 92/62 mmHg. Tanner stage was B1 PH 2. Neither striae rubrae nor acanthosis nigrans were present. On the basis of the clinical manifestations, iatrogenic hypercortisolism was suspected. Hence, the hypothalamic-pituitary-adrenal axis was investigated. Surprisingly, the levels of ACTH, serum cortisol and free urinary cortisol (three different samples) were undetectable (lower than the limit of quantitation of the immunoassays). These findings are due to the very low cross-reactivity of the immunoassay for cortisol against dexamethasone (*ADVIA Centaur® Cortisol* assay, Siemens Healthineers). The hypothesis of iatrogenic Cushing's disease was confirmed. Therefore, the ophthalmologic medications were reduced (netilmicin/dexamethasone 3mg/ml/1mg/ml; 1 drop twice a day in the right eye, 1 drop once a day every other day in the left eye). Three months later, the weight was reduced (BMI in the 85°-90° percentile), the speed of growth was normalized. Tests on the hypothalamic-pituitary-adrenal axis were repeated, showing normal levels of ACTH [8 pg/mL, reference intervals (RI) 5-49], serum cortisol (220 nmol/L, RI 150-160), free urinary cortisol (153 nmol/24 hours). We also measured the nocturnal salivary cortisol to use a different matrix (1.82 nmol/L, cut off <8.28 nmol/L). These findings confirm the clinical and laboratory suspects of iatrogenic Cushing due to topica eye-treatment with corticosteroid; the reduction of the dosage of eye drops has led to a normalization of the function of the hypothalamic-pituitary-adrenal axis. Although systemic absorption of topic ocular glucocorticoids has already been described, the onset of iatrogenic Cushing's disease due to corticosteroid eye treatment is extremely rare: only five cases (two of them pediatrics) have been reported in the literature.

There are no validated hypotheses to explain this exceptional phenomenon: it has been suggested that in these patients the pituitary gland may present a different response than others who are given the same eye treatment; therefore, we believe that individual response of patients had a major role in the presentation of the clinical and laboratory findings.

PP228 - EFFECTS OF PASIREOTIDE TREATMENT ON CARDIO-METABOLIC RISK IN PATIENTS WITH CUSHING'S DISEASE: AN ITALIAN, MULTICENTER STUDY.

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Patients with Cushing's disease (CD) have increased cardiovascular risk due to metabolic alterations caused by glucocorticoids excess. Pasireotide, a multireceptor-targeted somatostatin analogue, is a therapeutic option in CD patients in whom surgery is not curative or not feasible. Pasireotide has been shown to be effective in controlling hypercortisolism and to improve metabolic features. Recently, the visceral adiposity index (VAI) has been proposed as a marker of visceral adipose tissue dysfunction (ATD) and of the related cardio-metabolic risk. We aimed to assess the effects of 12-month pasireotide therapy on cardio-metabolic and cardiovascular risk in CD patients. In 16 CD patients (11 females), referred to the Endocrine Units of four Italian University Hospitals, we assessed anthropometric, clinical and biochemical parameters and calculated VAI, ATD severity, Framingham and Atherosclerotic CardioVascular Disease Risk Scores (FRS and ASCVD respectively), at baseline and after 6 and 12 months of therapy with pasireotide (1200-1800 mcg/daily). Before starting pasireotide therapy, ATD was present in 8/16 patients (severe in 2/16, mild in 2/16, moderate in 3/16). After 12 months of treatment: i) UFC levels (p=0,003), BMI (p<0,001), waist circumference (p=0,001), LDL-cholesterol (p=0,033), total-cholesterol (p=0,032), triglycerides (p=0,03), VAI (p=0,015) and ATD severity (p=0,026) were significantly decreased as compared to baseline; ii) ATD was present in only 1/16 patients; iii) prevalence of diabetes (p=0,015) and HbA1c levels (p=0,001) were significantly increased as compared to baseline; iv) FRS and ASCVD scores were not statistically different from pre-treatment values. In conclusion, twelve-month pasireotide treatment reduces cardio-metabolic risk in CD patients.

PP229 - EFFECTS OF 6 MONTHS PASIREOTIDE ON COAGULATION INDEXES IN CUSHING'S DISEASE

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INTRODUCTION

Cushing's disease is characterized by procoagulative profile with a consequent increase thrombotic risk. Pre-treatment with cortisol-reducing medications might normalize the coagulation impairment potentially reducing the risk of thromboembolic complications.