

Endocrine Abstracts

September 2022 Volume 83
ISSN 1479-6848 (online)

ESE Young Endocrinologists
and Scientists (EYES) 2022

2-4 September 2022, Zagreb, Croatia



published by
bioscientifica

Online version available at
www.endocrine-abstracts.org

CONTENTS

ESE Young Endocrinologists and Scientists (EYES) 2022

Adrenal and Cardiovascular

Oral

Steroidomic approach for the characterization of patients with non-alcoholic fatty liver disease	AO1
Combining steroid and global metabolome profiling by mass spectrometry with machine learning to investigate metabolic risk in benign adrenal tumours with mild autonomous cortisol secretion	AO2
Looking for fingerprints of increased susceptibility to adrenal crises	AO3
Effects of Fibroblast factor 21 to adrenal renewal after chronic hypercortisolism	AO4
Bilateral primary aldosteronism prediction by Integer scoring system	AO5
Adrenal venous sampling in tertiary centre from 2015 to 2022	AO6

Poster

Prader-Willi syndrome proteins NDN and MAGEL2 are implicated in HPA axis regulation	AP1
Autoimmune Polyglandular Syndrome Type 1 in siblings: assembling the jigsaw puzzle	AP2
Recurrent paraganglioma in patient with aneurysmal disease	AP3
Malignant PPGLs - diagnosis and treatment challenges in a developing country-case series presentation	AP4
Is it time for age and sex specific diagnostic criteria for patients with adrenal incidentalomas?	AP5
Interplay of MYC and HIF signaling in pheochromocytomas and paragangliomas: Impact on the differentiation and aggressiveness	AP6

Thyroid

Oral

Does mild form of subclinical hypothyroidism needs treatment?	TO1
Subacute thyroiditis (SAT) during the COVID-19 pandemic: preliminary data from the "ESE Covid Grant 2021" project	TO2
Combined levothyroxine/liothyronine therapy improves quality of life in hypothyroid thyroidectomized patients	TO3
Should we reduce the number of fine-needle aspirations of thyroid nodules?	TO4
Is our recommendation to quit smoking considered in patients with Graves' Disease and Graves' Orbitopathy?	TO5

Poster

The impact of lockdown on thyroid hormone metabolism in patients on levothyroxine replacement therapy residing in Adjara	TP1
Unilateral Graves Orbitopathy-case report	TP2
Possible factors of hypercalcitoninemia in a benign nodular thyroid disease	TP3
Interplay between thyroid, amiodarone and heart - case presentation	TP4
Autoimmune hyperthyroidism relapse with active severe Graves' orbitopathy during second trimester of pregnancy, and thyrotoxicity development in offspring	TP5
Thyroid parameters changes in mother-newborn pairs living in a selenium deficient environment	TP6
Therapeutic challenge in patient with ventricular septal defect, atrial fibrillation and thyrotoxicosis: Case report	TP7

Endocrine-related Cancer

Oral

Tumor suppressor role of RBM22 in prostate cancer acting as a dual-factor regulating alternative splicing and transcription of key oncogenic genes	ERCO1
Ablation of Znf3 & Trp53 induces metastatic adrenocortical carcinoma in mice	ERCO2
Hypothalamus-pituitary-adrenal axis recovery after adjuvant mitotane treatment in patients with adrenocortical carcinoma - a retrospective study.	ERCO3

Efficacy and safety of radiation therapy in advanced adrenocortical carcinoma (ACC)	ERCO4
PD-1, PD-L1 and CTLA-4 immune checkpoint expression - Is there a prognostic impact on adrenocortical carcinoma?	ERCO5
Outcome of Immuncheckpoint Inhibitor Therapy in Adrenocortical Carcinoma - A multicenter retrospective study	ERCO6

Poster

Synchronous eutopic and ectopic papillary thyroid carcinoma	ERCP1
A case of primary squamous cell carcinoma of the thyroid gland	ERCP2
Raising awareness for primary thyroid angiosarcoma - a rare diagnosis not to be missed	ERCP3
Impact of Androgen Deprivation Therapy on the bone and metabolic changes in men treated for localized prostate cancer	ERCP4
An exceptional case of a papillary thyroid carcinoma arising within an ovarian teratoma	ERCP5

Calcium and Bone

Oral

Hypercalcemia during pregnancy is associated with worse outcomes but not fetal loss	CBO1
Evidence of a non-classical phenotype of hypoparathyroidism (HPT) in a cohort of adult patients with β -thalassemia	CBO2
Bone metabolism and dual-release Hydrocortisone: results from a real-life study	CBO3
Markers of cardiometabolic and bone health in postmenopausal women on glucocorticoid replacement therapy due to adrenal insufficiency	CBO4

Poster

Severe hypomagnesemia due to chronic diarrhea - a case report	CBP1
Densitometry misinterpretation leading to unnecessary denosumab prescription	CBP2
Case report: denosumab in the management of aneurysmal bone cyst of the sacrum	CBP3
Osteitis fibrosa cystica in primary hyperparathyroidism due to bilateral intrathyroidal parathyroid adenomas - Clinical case	CBP4
Bilateral neck exploration is as safe as focused parathyroidectomy	CBP5
Hyperemesis gravidarum as a clinical presentation of primary hyperparathyroidism	CBP6

Diabetes, Obesity, Metabolism and Nutrition

Oral

Relation of HLA system genes in patients with type 1 diabetes and other autoimmune diseases	DOMNO1
Placental Signalling Contributes to Adipokine Dysregulation and Systemic Insulin Resistance in Gestational Diabetes Mellitus	DOMNO2
Type 1 diabetes mellitus in pregnancy: high incidence of large-for-gestational-age neonates despite adequate glycemic control and low glycemic variability	DOMNO3
Screening for diabetic retinopathy by an endocrinologist: a retrospective study	DOMNO4
Retrospective observational study of italian patients with diabetes mellitus in COVID-19 pre-vaccine era: a big data approach	DOMNO5
Anthropometric and metabolic outcomes after bariatric surgery: a single-centre experience	DOMNO6

Poster

Does phase angle analysis in overweight women be a surrogate marker of insulin resistance?	DOMNP1
Diabetes-induced changes in brain metabolism: a study of four cases	DOMNP2
Excessive presentation of primary hypertriglyceridemia on skin: a case report	DOMNP3

Reproductive and Developmental Endocrinology

Oral

Follicle stimulating hormone is efficient in increasing sperm parameters in idiopathic infertility	RDO1
Ketogenic state is able to improve testosterone serum levels - a meta-analytic approach	RDO2

Which sperm parameter limits could really guide the clinical decision in assisted reproduction?	RDO3
Comparison of eunuchoid skeletal proportions in male hypogonadism between men with congenital hypogonadotropic hypogonadism (CHH) and Klinefelter Syndrome (KS)	RDO4
Vascular erectile dysfunction as a mirror of general health: focus on patients comorbidities	RDO5
The role of thyroid autoimmunity in assisted reproduction outcome-not yet solved puzzle	RDO6

Poster

A Case of Postmenopausal Hirsutism	RDP1
Late-discovered mosaic Klinefelter syndrome with severe osteoporosis and obesity	RDP2
Pharmacodynamics and safety of human recombinant luteinising hormone (LH) in hypogonadotropic hypogonadal men: a new ongoing multicenter study	RDP3
Testosterone therapy in chronic liver disease	RDP4
Reliability of patient's auto-report on the regularity of their menstrual cycle	RDP5
Effects of COVID-19 on menstrual cycle changes in women with polycystic ovary syndrome	RDP6
Estrogen withdrawal associated psychosis (EWAP) as a result of hormone replacement treatment discontinuation in a patient with 46,XY gonadal dysgenesis	RDP7

Pituitary and Neuroendocrinology

Oral

Leukocyte telomere length and neuregulin-4 levels in female patients with acromegaly: Relationship between disease activation and body fat distribution	PN01
Real-world Use of Intravenous Hypertonic Saline for Hyponatraemia: a data-driven refinement of ESE guidelines	PN02
Development of novel immunoassays for the pro-opiomelanocortin joining peptide (A surrogate marker of adrenocorticotrophin levels) for use in the diagnosis of Cushing's syndrome	PN03
Cardiovascular parameters and endothelial dysfunction in Cushing's Syndrome following remission: A prospective study	PN04
Postoperative basal cortisol level as an indicator of pituitary surgery success in Cushing's disease treatment: a single centre retrospective study	PN05
Long-term outcomes of treatment of Cushing disease in UHC Zagreb	PN06

Poster

Newly diagnosed diabetes mellitus in an untreated hypopituitary patient	PNP1
An unusual cause of hypopituitarism with an even more unusual presentation - a case report	PNP2
A patient with aggressive prolactinoma	PNP3
Hypoglycaemia in patient with unrecognized pituitary stalk interruption syndrome	PNP4

Environmental Endocrinology

Oral

Influence of mercury on thyroid hormone levels in the Serbian population - Benchmark dose approach	EEO1
Influence of exposure to metaloestrogen - selenium on Leydig cell epigenetic status	EEO2
Commercially available multivitamin supplements during pregnancy are ineffective for optimal selenium supply for mothers and newborns	EEO3
Impact of COVID-19 on women's reproductive health	EEO4

Oral**TO1****Does mild form of subclinical hypothyroidism needs treatment?**

Velkoska Nakova V¹, Krstevska B², Volkanovska Ilijevska C³, Stevchevska A³, Muca A³, Todorovska B³ & Boshevski M⁴
¹Clinical Hospital, Stip, R.N.Macedonia, Internal medicine; ²Internal Medical Center "Srce", Skopje, R.N.Macedonia, Internal medicine; ³University Clinic of Endocrinology, Diabetes and Metabolic Disorders, Skopje, R.N.Macedonia, Endocrinology Department; ⁴University Clinic of Cardiology, Skopje, R.N. Macedonia, Cardiology department

Background

Overt hypothyroidisms warrants L-T4 treatment, but treatment in subclinical hypothyroidism (ScH), especially in mild form of ScH (TSH between 4.2-10mU/l and normal free thyroxine) is unknown.

Objectives

To compare the presence of risk factors for atherosclerosis in patients with mild form of ScH to euthyroid subjects.

Methods

Prospectively 67 consecutive patients with newly diagnosed ScH, and 30 healthy subjects were recruited from the outpatient department of University clinic of endocrinology in Skopje, R. of N. Macedonia. Measurement of thyroid hormones, thyroid antibodies, blood pressure, lipids, and carotid intima media thickness (CIMT) were performed in all patients.

Results

Mean TSH value in ScH group was 8.71 ± 1.9 mU/l. TSH value above 7mU/l was associated and positively correlated with symptoms of hypothyroidism. Prevalence of hypertension in ScH group was higher than the control group (35.4% vs. 13.3%, $P = 0.03$), with a 3.5 times higher risk for hypertension (OR = 3.5 95%CI 1.1 – 11.4). In patients with mild form of ScH statistical significant difference in percentages of patients with arterial hypertension, hypertriglyceridemia, and values of total cholesterol/HDL-C and LDL/HDL above upper reference value were found (33.9 vs. 13.3%, 33.9 vs. 10%, 26.5 vs. 6.9%, 30.6% vs. 10.3%, respectively $P < 0.05$). Mean CIMT was statistically significantly higher in ScH patients than the control group (0.61 ± 0.1 vs. 0.56 ± 0.1 mm, $P = 0.03$), but not different between the mild form of ScH and control group ($P = 0.08$). Positive thyroid antibodies in the ScH group have no statistically significant influence on the CIMT.

Conclusions

In a small study, mild form of ScH was associated with higher risk for atherosclerosis, so these patients may benefit with L-T4 treatment.

Key words. Subclinical hypothyroidism, risks factors, atherosclerosis, carotid intima media thickness

DOI: 10.1530/endoabs.83.TO1

TO2**Subacute thyroiditis (SAT) during the COVID-19 pandemic: preliminary data from the "ESE Covid Grant 2021" project**

Zanni E.^{1, 2}, Lioacono S.^{1, 2}, Sueri R.^{1, 2}, Cecchetti C.³, Crivicich E.⁴, Di Marco F.⁴, Muller I.^{5, 6}, Tucci L.³, De Vincentis S.^{1, 2}, Monzani M. L.^{1, 2}, Simoni M.^{1, 2}, Santi D.^{1, 2} & Brigante G.^{1, 2}
¹ University of Modena and Reggio Emilia, Department of Biomedical, Metabolic and Neural Sciences; ² Azienda Ospedaliero-Universitaria of Modena, Unit of Endocrinology, Department of Medical Specialties; ³ Azienda Ospedaliero-Universitaria of Bologna, Division of Endocrinology and Diabetes Prevention and Care, Department of Medical and Surgical Sciences (DIMEC); ⁴ University of Milan, School of Specialisation in Endocrinology; ⁵ University of Milan, Department of Clinical Sciences and Community Health; ⁶ Fondazione IRCCS Ca' Granda Ospedale Maggiore Policlinico, Department of Endocrinology

Background

A possible association between severe acute respiratory syndrome coronavirus (SARS-CoV)-2 pandemic and subacute thyroiditis (SAT) has been reported.

Objectives

To evaluate SAT clinical characteristics, correlating them to virus exposure and/or vaccine and to evaluate thyroid function according to the length of time after symptoms onset.

Methods

We performed a prospective, observational, multi-centre study, considering three Italian centres. Patients with documented SAT diagnosis were enrolled from

November 2020 to May 2022 and followed up for 12 months. SARS-CoV-2 infection (i.e. positive rhino-pharyngeal swab obtained within 3 months before SAT onset) and vaccination were recorded. This interim analysis was performed considering the visit performed at diagnosis.

Results

A total of 67 subjects (79.1% F, 20.9% M) were enrolled (age: 49.9 ± 12.9 years). The cohort was divided considering the time between symptoms onset and endocrinological evaluation: Group1 included patients who underwent visit within 15 days (44.8%), whereas Group2 those who delayed visit beyond 15 days (55.2%). No difference in inflammation indexes and thyrotoxicosis rate (70.0% vs 70.3%, $P = 0.381$) was found between groups. Hypothyroidism rate was higher in Group2 than in Group1 (8.1% vs 0.0%, $P = 0.004$). The entire cohort was divided according to either SARS-Cov2 infection (13 patients–19.4%) or vaccination (23 patients–34.3%). Thyrotoxicosis rate and inflammation indexes were not significantly different between patients with or without SARS-Cov2 infection and/or vaccination. At multinomial logistic regression analyses, thyrotoxicosis was predicted by erythrocyte sedimentation rate (ESR) elevation ($P < 0.001$), SARS-CoV-2-vaccination ($P = 0.002$) and respiratory symptoms ($P < 0.001$).

Conclusions

Neither SARS-CoV-2 infection nor vaccination affected the clinical SAT presentation. However, SAT-related thyrotoxicosis was predicted by ESR elevation, vaccination, and respiratory symptoms.

DOI: 10.1530/endoabs.83.TO2

TO3**Combined levothyroxine/liothyronine therapy improves quality of life in hypothyroid thyroidectomized patients**

Corleto R.^{1, 2}, Boselli G.^{1, 2}, Margiotta G.^{1, 2}, Monzani M. L.^{1, 2}, Craparo A.^{1, 2}, Locaso M.^{1, 2}, Sperduti S.^{1, 3}, Roy N.¹, Simoni M.^{1, 2, 3}, Rochira V.^{1, 2}, Santi D.^{1, 2} & Brigante G.^{1, 2}
¹ University of Modena and Reggio Emilia, Department of Biomedical, Metabolic and Neural Sciences; ² Azienda Ospedaliero-Universitaria of Modena, Unit of Endocrinology, Department of Medical Specialties; ³ University of Modena and Reggio Emilia, Center for Genomic Research

Introduction

Despite normal thyroid stimulating hormone (TSH) serum levels, 10% of hypothyroid patients treated with LT4 complain of hypothyroidism symptoms, likely linked to decreased availability of free triiodothyronine (fT3). Thus, combined levothyroxine/liothyronine (LT4/fT3) therapy was suggested to ensure a more physiological balance in peripheral tissues.

Aim

To evaluate the effectiveness of combined LT4/fT3 therapy in thyroidectomized subjects, considering peripheral markers and quality of life.

Methods

An interim analysis of a prospective, randomized, placebo-controlled, double-blinded clinical trial was performed. Totally thyroidectomized patients treated with LT4 and with TSH levels within reference range in the previous three months were enrolled and randomized in two groups: combined LT4/fT3 therapy (study group) and LT4+placebo (control group). Lipid profile, sex hormone binding globulin, osteocalcin, C-terminal telopeptide and bone alkaline phosphatase were evaluated as peripheral markers. Quality of life was evaluated by ThyPRO 39 questionnaire.

Results

139 patients (age 55.6 ± 12.1 years) were enrolled, 70 in the study and 69 in the control group. Combined LT4/fT3 therapy resulted in more frequent iatrogenic thyrotoxicosis than LT4 monotherapy (9.8% vs 2.2%; $P < 0.05$), requiring more frequent dose adjustments (44.5% vs 22.5%; $P < 0.001$). Peripheral markers neither changed between study and control groups, nor among visits. Combined therapy improved quality of life, measured by a reduction in anxiety ($P = 0.019$), depression ($P = 0.037$), emotional susceptibility ($P = 0.034$) and item 12 ($P = 0.005$) from baseline to visit 3, while no significant differences were detected in controls.

Conclusion

Six months of combined therapy significantly improved quality of life, but did not lead to a change in peripheral tissue markers. However, subjects treated with LT4/fT3 therapy require more dose adjustment and are at higher risk of overtreatment.

DOI: 10.1530/endoabs.83.TO3