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M Cohen-Solal	France	D Goulis	Greece	C Krausz	Italy	D Olsson	Sweden	D Schulte	Germany	M Zarkovic	Serbia
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CONTENTS

e-ECE 2020

22nd European Congress of Endocrinology

PRIZE LECTURES AND BIOGRAPHICAL NOTES

The Geoffrey Harris Prize Lecture	AP1
The <i>European Journal of Endocrinology</i> Prize Lecture	AP2
European Hormone Medal Lecture	AP3
Clinical Endocrinology Trust Lecture	AP4

PLENARY LECTURES

Exercise as medicine – a translational perspective	PL1
Glucocorticoids in cancer: a new paradigm	PL2
Harnessing the microbiome in metabolic disease	PL3
Mechanisms for SARS-CoV-2 cell entry	PL4
Maternal thyroid hormone and child brain development	PL5
It takes thyroid hormone to make sense	PL6
Effects of EDCs on neuro-endocrine systems and behaviour	PL7

SYMPOSIA

New horizons in pheochromocytoma and paraganglioma	S1.1–S1.3
Osteoporosis and fracture prediction	S2.1–S2.3
Controversial issues in bariatric surgery	S3.1–S3.3
Unveiling signatures in pituitary neuroendocrine tumours	S4.1–S4.3
Hyperthyroidism across the lifespan	S5.1–S5.3
Adrenocortical carcinoma	S6.1–S6.3
Endocrine disruptors, just a hype or not?	S7.1–S7.3
PCOS: from Genetics to Treatment	S8.1–S8.3

COVID-19 SESSION

Endocrine targets related to COVID infection	CS1.1
Managing the Cytokine storm.	CS1.2
How strong is obesity as a risk factor for COVID-19 patients	CS1.3

ORAL COMMUNICATIONS

Adrenal and Cardiovascular Endocrinology	OC1.1–OC1.7
Bone and Calcium	OC2.1–OC2.7
Diabetes, Obesity, Metabolism and Nutrition	OC3.1–OC3.7
Pituitary and Neuroendocrinology	OC4.1–OC4.7
Thyroid	OC5.1–OC5.7
Hot Topics (including COVID -19)	OC6.1–OC6.7
Endocrine-related Cancer	OC7.1–OC7.7
Environmental Endocrinology	OC8.1–OC8.6
Reproductive and Developmental Endocrinology	OC9.1–OC9.7
Young Investigators	YI1–YI12

AUDIO EPOSTER PRESENTATIONS

Adrenal and Cardiovascular Endocrinology	AEP1–AEP121
Bone and Calcium	AEP122–AEP242
Diabetes, Obesity, Metabolism and Nutrition	AEP243–AEP527
Endocrine-related Cancer	AEP528–AEP540, AEP655
Environmental Endocrinology	AEP541–AEP542
General Endocrinology	AEP543–AEP559
Pituitary and Neuroendocrinology	AEP560–AEP777
Reproductive and Developmental Endocrinology	AEP778–AEP856
Thyroid	AEP857–AEP1000
Hot topics (including COVID-19)	AEP1001–AEP1110

EPOSTER PRESENTATIONS

Adrenal and Cardiovascular Endocrinology	EP1–EP58
Bone and Calcium	EP59–EP123
Diabetes, Obesity, Metabolism and Nutrition	EP124–EP265
Endocrine-related Cancer	EP266–EP270
Environmental Endocrinology	EP271
General Endocrinology	EP272–EP279
Pituitary and Neuroendocrinology	EP280–EP373
Reproductive and Developmental Endocrinology	EP374–EP410
Thyroid	EP411–EP532
Hot topics (including COVID-19)	EP533–EP589

AUTHOR INDEX

only a large number of examined in groups to obtain confirmation of the identified changes in the pilot study.

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EP138

Adipokines vaspin and omentin as risk markers of disorders of carbohydrate metabolism in overweight and obese patients

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Adipokine omentin is a connecting link between obesity and type 2 diabetes mellitus. It modulates insulin sensitivity of peripheral tissues and its secretion may change in the developed inflammation of adipose tissue at its excessive accumulation. Chemokine fractalkine is a marker of the development of inflammatory processes in the body. Objective: omentin and fractalkine contents in blood circulation depending on the degree of adipose tissue accumulation, waist circumference, blood insulin level and HOMA-IR in representatives of Ukrainian population.

Materials and methods

250 individuals aged (65.48±11.86) years were examined, their waist circumferences were measured, adipose tissue mass was assessed by bio impedance method, including relatively to the total body mass; by immune enzyme method contents of insulin, fractalkine and omentin in circulation were determined; HOMA-IR index was determined.

Results

It was revealed that blood fractalkine and omentin levels show negative correlation between them ($r=-0.863$, $P<0.001$). Blood fractalkine level correlates positively with adipose mass of the body ($r=0.5341$, ($P<0.001$)); waist circumference – ($r=0.4542$, ($P<0.001$); insulinemia and HOMA-IP levels: ($r=0.7798$, ($P<0.001$) and $r=0.745$, ($P<0.001$)). Blood fractalkine level (ng/ml)=[407.478+57.1702 × HOMA-IR+2.2580 × waist circumference]; $R_2=0.626$; $F=273.85$; $P<0.00001$). Omentin level correlates negatively with adipose body mass ($r=-0.609$, ($P<0.001$)); waist circumference – ($r=-0.397$, ($P<0.001$); insulinemia and HOMA-IR levels: ($r=-0.799$, ($P<0.001$) and $r=-0.7706$, ($P<0.001$)). Blood omentin level (ng/ml)=[618.3103 – 25.6928 × HOMA-IR – 2.9962 × adipose tissue mass / total body mass]; ($R_2=0.676$; $F=339.89$; $P<0.00001$). It was proved that accumulation of adipose mass more than 25 % of the total body mass determines growth of fractalkine level up to 750 ng/ml and over; HOMA-IR>2.77, decreased level of omentin to 500 ng/ml and less. Contents of adipose tissue more than 34 % of total body mass determine increased fractalkine levels up to 900 ng/ml. and more; HOMA-IR>4.00, decreased level of omentin to 400 ng/ml and lower.

Conclusion

Important role of fractalkine and omentin in pathogenesis of diabetes mellitus in obesity was proved. The correlation was established between the adipose tissue accumulation, changes in its endocrine function, development of inflammatory processes in the body, abdominal obesity, insulin resistance and type 2 diabetes mellitus onset.

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EP139

Autoimmune diseases associated with T1D

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Introduction

Type 1 diabetes can be associated with one or more other autoimmune pathologies in case of predisposing immune background.

The aim of our study was to research the autoimmune pathologies associated with type 1 diabetes and to describe the clinical and biological characteristics of this population.

Patients and methods

This is a retrospective descriptive study including 26 patients with type 1 diabetes with at least one autoimmune pathology associated with diabetes.

Results

The average age was 35.7±8.6 years. The sex ratio was 0.23. Diabetes had evolved for an average of 17.4±6.8 years. The average body mass index (BMI) was 28.2±3.2 kg/m². The average HbA1C was 9.1±2.2%. The average creatinine clearance was 99.2±12.3 ml/min (CKD-EPI). The most widely described degenerative complication was retinopathy (28.1%). Hashimoto's thyroiditis was the autoimmune disease most associated with diabetes (73%) followed by celiac disease (19.2%). Only one case of vitiligo and another case of Biermer's anemia had been found. All cases of thyroiditis were diagnosed after diabetes, as was the case with Biermer's disease. Vitiligo preceded the diagnosis of diabetes. Celiac disease preceded diabetes in the majority of cases.

Conclusion

The frequent association of autoimmune pathologies with diabetes encourages them to be screened regularly so that they are managed on time.

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EP140

Awareness of patients with type 2 diabetes about their disease

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Background

Attendance and active participation in diabetes school classes is an important element in disease management. It has been noted that self-learning and self-help predetermine the clinical outcomes of diabetes and the quality of life of patients.

Aim

To evaluate the awareness of patients with type 2 diabetes (T2D) about their disease.

Materials and methods

45 patients with T2D were included. The survey contained 5 questions: A questionnaire based on the Diabetes Care Profile (DCP) questionnaire was offered to all participants. As part of this work, the following sections have been analyzed: school diabetes, glucose self-control (which includes questions on hypo- and hyperglycemia), power supply, physical activity, prosperity, complication control, observance of the recommendations for treatment of the disease.

Results

55.5% (25) are willing to watch, observe, and only one in five (20.0% (9)) would like to communicate interactively. One in three patients with type 2 S.D. does not self-monitor glucose until 33.3% in the morning and 35.6% two hours after a meal. The presence of symptoms of hypoglycemia was indicated by patients who received either insulin treatment or insulin treatment in combination with oral drugs (44.4%). 43.2% experience hyperglycemia and 54.5% do not. 28.2% do not take any action on this issue, and 33.3% increase their short insulin dose. Only 10.3% increase the dose of prandial insulin or resort to physical activity. 12.8% and 15.4% either consume more fluid or skip staple foods or snacks, respectively. 55.8% exercise regularly. And 44.3% do not pay due attention to this recommendation. 70.1% noted that their physical activity is light, 27.0% have a moderate load. 46.0% do not agree that they are healthy. 35.1% find it difficult to answer the question unambiguously and 18.9% feel healthy. According to 55.3% of patients, diabetes interferes with other aspects of life, 26.3% do not know how to answer the question, and 18.4% disagree. 41.0% of patients experience high levels of stress and one in four 25.6% are unfamiliar with these feelings by self-esteem.

Conclusion

Patients with type 2 DM are familiar with the main actions in hyperglycemia, but the practical application of these recommendations does not give proper results. Half of those interviewed do not feel healthy and the disease interferes with other aspects of their lives. Many agree that they are making efforts to control the disease, but are not aware of what this concept includes.

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