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КАФЕДРА КЛІНІЧНОЇ ІМУНОЛОГІЇ, АЛЕРГОЛОГІЇ ТА ЕНДОКРИНОЛОГІЇ

АКТУАЛЬНІ ПИТАННЯ ДІАБЕТОЛОГІЇ

Матеріали науково-практичної інтернет-конференції 10-12 червня, 2015



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Матеріали науково-практичної інтернет-конференції

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У збірнику представлено матеріали науково-практичної інтернет-конференції «Актуальні питання діабетології» (Чернівці, 10-12.06.2015р.) зі стилістикою та орфографією у авторській редакції. Публікації присвячені актуальним питанням діабетології. Розглянуті сучасні аспекти епідеміології та патогенезу, імунопатології цукрового діабету, питання сучасних можливостей діагностики й лікування цукрового діабету та його ускладнень, проблеми цукрового діабету на тлі захворювань внутрішніх органів, хірургічні та психо-соціальні апекти діабетології.

Загальна редакція – доктор медичних наук, професор Пашковська Н.В. Редактор – кандидат медичних наук, доцент Оленович О.А.

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from clear, patient factors such as age, age of asthma onset, gender, race, and other factors may modify the effect of obesity on asthma phenotype.

The response to exercise is a manifestation of the existing bronchial hyperreactivity inherent in most, if not all asthma phenotypes.

In the entire cohort of patients with and without exercise induced bronchial constriction by cluster analysis (K-means method) two clinical subphenotypes were formed: the first asthma subphenotype was characterized by statistically more significant birth weight (3749±326 versus 3102±240 g), more evident allergic skin manifestations at an early age, a higher content of total IgE in serum.

By cluster analysis by K-means from the entire cohort of patients with asthma with exercise induced bronchial constriction the cluster of 11 patients was composed with statistically significant differences in disease duration: less birth weight (3100±182 versus 3674±219 g), higher total number of points for the ACQ test, more frequent nocturnal asthma symptoms, more significant bronchial spasm of medium bronchi.

The current knowledge of the existence of two obesity-asthma phenotypes (early- versus late-onset asthma) should encourage investigators to study these entities separately since just as they have distinct presentations. The most universally effective management plan for obese children with persistent asthma continues to involve inhaled corticosteroids, weight-loss, daily exercise and repeated asthma education regarding inhaler technique and trigger avoidance. Significant portion of this cohort will respond best to ICS with long-acting beta-agonists, a portion will respond best to ICS plus montelukast, and the remaining will respond best to a higher dose of ICS.

Conclusions. Cluster analyses of the data from pediatric clinical population of school age have identified phenotypic subsets of patients with asthma, and the assessment of BMI and birth weight in asthma cluster analyses has revealed their relationship to clinical features of bronchial asthma in children.

IDENTIFICATION OF HIGH CARDIOVASCULAR RISK IN DIABETIC INDIVIDUALS

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Introduction. Cardiovascular diseases (CVD), including coronary heart disease (CHD) and stroke, are the leading causes of mortality worldwide. There are key risk factors mediating cardiovascular risk and type 2 diabetes is one of them: many observational studies have shown that the risk of CVD, especially coronary heart disease (CHD), is two to five times higher in people with diabetes mellitus (DM) than in people without diabetes, suggesting that it confers an equivalent risk to having had a myocardial infarction. In this context, the prevention of CVD in diabetic patients is a major public health goal. A key component for effective

targeting of these interventions is the assessment of an individual's future risk of developing CVD within a defined time period, based on identification of his/her multiple risk factors, and implementing actions oriented toward reducing modifiable risk factors, their optimal management.

The **objective** of the present analysis was to explore the applicability of multivariate risk prediction chart in identification of high risk diabetic individuals to optimize strategies for prevention of CVD.

Material and methods. We examined 23 patients with type 2 diabetes (43% men and 57% women, mean age - 53,5±1,6 years), hospitalized to Chernivtsi Regional Endocrinological Center. The diagnosis of type 2 DM has been estimated on the basis of the WHO recommendations. The average duration of DM in enrolled patients -7.2 ± 0.5 years: in 29% of participating patients the duration of diabetes was less than 5 years $(2,9\pm0,3 \text{ years})$, in 30% - 6-10 years $(7.9\pm0.65 \text{ years})$, in 30% of patients had diabetes longer than 10 years (11,79±0,8 years). Among all examined patients 30% were treated by oral hypoglycemic agents, 43% were on combined hypoglycemic therapy and 27% received insulin preparations. Aiming for a target blood pressure level (BP) of 130/80 mm Hg or lower, treatment by an ACE inhibitor or an angiotensin receptor blocker was prescribed to 74% of examined diabetic patients. No CVD episodes were noticed in patients' previous medical history. Except standard clinical patients' examination findings, information from medical records and selfadministered questionnaires was used. A risk chart, derived from long-term prospective cohort study ADVANCE, was used to evaluate the probability of an individual to suffer from coronary events during a 4-year follow-up period. Individual's risk profile was calculated according to scoring scheme by clusters of modifiable and non-modifiable risk factors, considered as influencing on CVD development: age at diagnosis (10 classes), known duration of diabetes (9 classes), gender, history of atrial fibrillation episodes, presence of retinopathy, albuminuria, hypotensive medications use, levels of pulse blood pressure (3 classes), glycated hemoglobin A_{1C} (Hb A_{1C}) (3 classes) and serum cholesterol (4 classes). Value scale for each of the selected risk factors, grouped into convenient intervals and added together, was to generate the total risk score and percentage of individual's 4-year risk of coronary events.

Results. According to the obtained findings, the probability of CVD development in the examined patients was $(3,0\pm0,5)\%$ and only in 17% of them it exceeded 5% rate. Our analysis indicates, that the gradient for risk according to age and gender is slightly noticeable, and despite of the moderately raised blood pressure in diabetic patients the risk score identifies pulse pressure risk score as low, that probably results from continued blood pressure monitoring and antihypertensive therapy. Meanwhile such risk factors as patients' age at diagnosis, HbA_{1C} level and serum cholesterol concentration are more significant contributors to predictive risk score of examined individuals.

In 35% of examined patients, aged 35-39 years at diagnosis, the CVD risk score was (2,1±0,5)%, being 1,8 times less as compared with risk score for 31% of patients, whose age at diagnosis was 51-56 years; the highest CVD risk score was calculated for 9% of examined individuals, aged 57-62 years at DM diagnosis.

The mean entry HbA_{1C} of participants was $(10,1\pm0,3)\%$: in 17% of examined patients it's level was $(8,1\pm0,3)\%$, followed by CVD risk $(1,5\pm0,5)\%$, in 83% of patients it's level was $(10,5\pm0,3)\%$, followed by CVD risk $(3,3\pm0,5)\%$, exceeding CVD risk index in previous group of patients by 2,2 times.

The mean baseline serum cholesterol level of participants was $(5,9\pm0,4)$ mmol/L: in 13% of examined patients it's level was <3 mmol/L, followed by CVD risk $(1,2\pm0,5)\%$, in 35% of patients it's level was 3<hr/>cholesterol≤6 mmol/L, followed by CVD risk $(2,4\pm0,7)\%$, in 43% of patients it's level was 6<hr/>cholesterol≤9 mmol/L, followed by CVD risk $(3,7\pm0,8)\%$, in 9% of patients it's level was (9+) mmol/L, followed by CVD risk $(4,2\pm0,1)\%$. These results emphasise the necessity to optimize the cholesterol lowering therapy in diabetic patients next to the improvement of glycaemic control up to target HbA_{1C} level.

Conclusions. Individual CVD risk in type 2 diabetic patients is age and sex specific and noticeably depends on the patients' age at diagnosis, HbA_{1C} level and serum cholesterol concentration, that emphasises the adequacy of glycaemic control and lipid/cholesterol lowering therapy as main targets for CVD risk management strategies in diabetic patients. A recent inquiry emphasised the benefits of using charts or scores for cardiovascular risk in getting treatment decisions made alongside realistic estimates of patient susceptibility to cardiovascular disease. Such global approach to the individual patient has interesting daily practice implications, as it provides a useful tool for clinicians and patients, adding diagnostic and prognostic value to cardiovascular evaluation. A better understanding of these available assessment tools can help physicians to optimize management and outcomes in patients who are initially categorized as at CVD risk. The simplicity of the risk score enables a rapid preliminary assessment of risk. Thus the score has wide applicability in general practices and endocrinological clinics, providing a simple means of quantifying a patient's risk of cardiovascular disease based on what should be routinely available information.

LIVER ENZYMES IN PATIENTS WITH TYPE 2 DIABETES AND METABOLIC SYNDROME

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Introduction. A number of studies have reported that liver enzymes levels independently predict incident type 2 diabetes, metabolic syndrome, and cardiovascular diseases (CVD). In addition, these markers have been shown to be associated with indirect measures of insulin resistance including fasting insulin levels and the homeostasis model assessment of insulin resistance (HOMA-IR). Being inexpensive and routinely collected in clinical settings, these liver markers

АЛФАВІТНИЙ ПОКАЖЧИК:

Абрамова Н.О.	35	Паліброда Н.М.	68,69
Акентьєв С.О.	37,38	Патратій М.В.	68,69
Безрук Т.О.	36	Пашковська Н.В.	8,35
Березова М.С.	37,38	Пашковський В.М.	8
Бесединська О.В.	39	Петринич О.А.	70
Беседінський В.І.	39	Пішак В.П.	72
Білоус І.І.	41,43,64,65,66,67	Попадюк І.М.	37,38
Гарас М.Н.	45	Ризничук М.О.	74,76,77
Дмитрук В.П.	74,76,77	Ротар С.С.	91
Ілюшина А.А.	46,54	Сафонова О.В.	79
Казанцева Т.В.	47	Сорокман Т.В.	80,82
Каспрук Н.М.	49,51	Сулига І.Б.	79
Костів М.І.	74,76,77	Суслик Г.І.	84
Костіцька І.О.	53	Трофіменко О.В.	60
Крецу Т.М.	74,76,77	Урбанович А.М.	83,84
Ленковська Г.С.	60	Чорна О.О.	60
Лищук О.З.	84	Шаповал О.А.	53
Ляшук П.М.	54,56	Шлик О.Г.	80,82
Ляшук Р.П.	54,56	Шоріков Є.I.	86,89
Маслянко В.А.	57,58,59	Шорікова Є.I.	86,89
Мельник Л.М.	54	Юрценюк О.С.	91
Олексюк С.І.	69	Abramova N.O.	94
Оленович О.А.	60	Bogutska N.K.	95
Павлович Л.Б.	43,62,64,65,66,67	Olenovych O.A.	97,99