МІНІСТЕРСТВО ОСВІТИ ТА НАУКИ УКРАЇНИ

СУМСЬКИЙ ДЕРЖАВНИЙ УНІВЕРСИТЕТ

МЕДИЧНИЙ ІНСТИТУТ



# АКТУАЛЬНІ ПИТАННЯ

# ТЕОРЕТИЧНОЇ ТА КЛІНІЧНОЇ МЕДИЦИНИ

## Topical Issues of Theoretical and Clinical Medicine

**ЗБІРНИК ТЕЗ ДОПОВІДЕЙ**
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5 day, while in patients from K group–only on the 10th day. 2 weeks after initiation of therapy asthenic-vegetative syndrome of rather low intensity was found only in 3 persons (10,0%) of O group, while in K group it remained in 11 patients (36,7,0%).

**Conclusion:** the application of L-carnitine in the treatment of patients with chronic pankreatitis and obesity promotes more rapid achievement of chronic pankreatitis' clinical remission, optimizing the lipid spectrum of the blood and reducing the inflammatory swelling of the pancreas.

## CARDIOVASCULAR COMPLICATIONS MARKERS IN HYPERTENSIVE PATIENTS WITH TYPE 2 DIABETES MELLITUS

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**The increase** of blood pressure (BP) is the main risk factor of cardiovascular complications (CVC) for patients with type 2 diabetes mellitus (DM). There are also other markers of these complications such as glycated hemoglobin (HbA1c), dyslipidemia, characterized by atherogenic index (AI).

The aim of our study was the determination of connection between markers of cardiovascular complications (CVC) for patients with type 2 DM and AH.

**Participants and methods**. We involved 147 patients, treated in Sumy City Clinical Hospital № 1, in our clinical trial. They were divided in two groups. Patients from the first (I) group had the AH and concomitant type 2 DM. Persons from the second (II) had only AH. There are 87 patients in the I group and 60 persons in the II. The patients were more than 45 years old. The duration of type 2 DM was (11±0,53) years old.

The levels of HbA1c, general cholesterol (GCH) and different fractions of lipoproteins such as lipoproteins with high density (LPHD), lipoproteins with low (LPLD) and very low density (LPVLD) are obtained in blood serum. The atherogenic index was calculated with the help of mathematic method (AI = GCH − CH LPHD / CH LPHD).

Student criteria (t) and the veracity of differences (p) are used for assessment results.

**Results.** The mean levels of HbA1c were (6,8±0,21)%, (4,2±0,43)%, t = 5,43, p < 0,001 for participants from the I,II groups respectively. The mean levels of AI were (3,8±0,04), (3,1±0,02), t = 15,65, p < 0,001 for participants from the I,II groups respectively. The levels of systolic BP were (156±0,45)mmHg, (143±0,66)mmHg, t = 16,27, p < 0,001 and of diastolic − (105,3±0,6)mmHg, (94±0,43)mmHg respectively for patients with combination of AH and type 2 DM and for persons with AH. The higher levels of BP, HbA1c and more severe dyslipidemia are the characteristics of patients with AH and type 2 DM in comparing with hypertensive persons.

**Conclusions.** There is the connection between factors of CVC such as AI, HbA1c, systolic and diastolic BP for patients with AH and type 2 DM. It is very important to define these markers for preventing end points and for improving treatment.

## X-ray STRUCTURE CHARACTERISTIC OF DIABETIC OSTEOARTHROPATHY ON THE EARLY STAGES

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**The aim** of this paper is to study structural peculiarity of the bone on the early stages of diabetic osteoarthropathy.

**Materials and methods.** Total of 67 patients with type 1 and 2 diabetes, who had diabetic foot 0-III stage by Wagner`s classification, and the normal body mass index were included in the study. There were two groups of patients: 1 group included 33 patients with the duration of diabetes up to 10 years, 2 group – 34 patients with the duration of diabetes more than 10 years. The control (0 group) included 30 practically healthy persons. The bone system investigation was done by the

roentgenologic complex «OperaT» (General Medical Merate GMM, Italy). Dorso-plantar and profile projection images were evaluated for diabetic osteoarthropathy early diagnostics.

**Results and discussions.** According to obtained data about foot tilt angle (α), in the first group 81,7% patients had mild changes (I stage) , 12,1% - moderate (II stage), 3,1% - severe (III stage of flatfoot). In the second group I stage of flatfoot was diagnosed in 70,6% of patients, II stage – in 23,6% and III stage – in 2,9%. In the 0 group only 23,3% patients had I stage of flatfoot and 76,7% - normal foot tilt angle. The calcaneus tilt angle (γ) was normal in 100% patients among 1, 2 and 0 groups. The arch height (h) was normal only in 3,1% of the patients in 1 group, 2,9% - in 2 group and 76,7% in 0 group. Only 3,1% patients in 1 group and 2,9% in 2 group had normal anatomical and structural characteristics compared.

**Conclusions.** According to the obtained data roentgenologic quantitative indexes, which include relation between height of the arch, foot length, width, foot tilt and calcaneus tilt angle, can be used as early criteria of screening diagnostics of Charcot osteoarthropathy in practice.

## OPTIMIZATION OF ANTICOAGULATION IN PATIENTS WITH ATRIAL FIBRILATION

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**Introduction**: Anticoagulation with vitamin K antagonist (VKA) has been an enduring gold standard for stroke prevention in AF as well as for the prophylaxis and long-term treatment of venous thromboembolism. But the potential for serious bleeding complications of the drug remains a problem for the safe use of drug.

**Aim**: Examine the prevalence of thromboembolic and bleeding complications in patients with non-valvular atrial fibrillation who were receiving warfarin in Ukraine (Sumy) and who were receiving apixaban in Italy (Foggia).

**Metarials and methods**. 35 Ukrainian patients were recruited between July 2015 and September 2016 and 25 Italian patients were observed during the period October 2016- February 2017. They were divided into two groups: firsts group of patients who were taking warfarin and second group of patients who were taking apixaban. We used the CHA2DS2VASc score to assess the risk of thromboembolic complications (TEC), scale HAS-BLED to assess the risk of bleeding, control of laboratory parameters (blood count, creatinine, glomerular filtration rate (GFR) by MDRD, coagulation).

**Results.** The majority of patients (82%) were aged from 65 to 70 years. Apixaban 5 mg twice daily reduced stroke or systemic embolism by 21% compared with warfarin, combined with a 31% reduction in major bleeding and an 11% reduction in all-cause. Rates of haemorrhagic stroke and intracranial haemorrhage, but not of ischaemic stroke, were lower on apixaban.

**Conclusions**. Both VKAs and NOACs are effective for the prevention of stroke in AF. Therefore, we recommend targeting the INR between 2.0 and 3.0 in patients on VKAs, maintaining a high TTR (e.g. ≥70% ), and to consider switching to a NOAC when a high TTR cannot be sustained. Apixaban dosing should follow the dose-reduction criteria evaluated in the clinical trials, considering renal function, age, and weight. Patient information and empowerment, best delivered through integrated AF management, seem paramount to achieve this goal.