

Міністерство освіти та науки України  
Сумський державний університет  
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# АКТУАЛЬНІ ПИТАННЯ ТЕОРЕТИЧНОЇ ТА ПРАКТИЧНОЇ МЕДИЦИНИ

Topical Issues of Clinical and Theoretical  
Medicine

**Збірник тез доповідей**  
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**РЕЗУЛЬТАТЫ ЛЕЧЕНИЯ ТРОМБОЗА РЕТИНАЛЬНЫХ ВЕН АФЛИБЕРЦЕПТОМ***Яремко Е.Р.**Научный руководитель д-р.мед. наук, проф. Марченко Л.Н.**Кафедра глазных болезней**Белорусский государственный медицинский университет, г. Минск*

Актуальность: Тромбозы ретинальных вен составляют около 60% от всей острой сосудистой патологии органа зрения и в 15% случаев являются причиной инвалидности по зрению. Важным механизмом в патогенезе заболевания является нарушение ангиогенеза. Ключевым фактором, вызывающим неоваскуляризацию, признан фактор роста эндотелия сосудов (ФРЭС). Афлиберцепт (Eylea, Bayer) является наиболее эффективным анти-ФРЭС препаратом среди зарегистрированных в РБ.

Цель: установить эффективность лечения афлиберцептом тромбоза ретинальных вен.

Материал и методы. В период с января 2014 г. по февраль 2016 г. на лечении афлиберцептом в кабинете ретинальной патологии УЗ 3 ГКБ г. Минска находились 18 пациентов с тромбозом ретинальных вен. Из них было отобрано 12 пациентов (12 глаз), которым проводилось однократное (7 глаз) или двукратное (5 глаз) введение интравитреальной инъекции 2 мг афлиберцепта через плоскую часть цилиарного тела. Исследовались результаты оптической когерентной томографии (ОКТ) макулярной области до и после проведенной терапии.

Результаты и обсуждение. По данным ОКТ у пациентов была выявлена неоваскуляризация, которая сопровождалась отёком сетчатки и кровоизлияниями, экссудативными и геморрагическими её отслойками. Средняя центральная толщина сетчатки после однократного введения афлиберцепта уменьшилась на  $106 \pm 36$  мкм (критерий Уилкоксона,  $p < 0,05$ ) (исходная – 356,7 мкм, после инъекции – 250,3 мкм), после двукратного – на  $140 \pm 47$  мкм ( $p < 0,05$ ) (исходная – 397,4 мкм, после первой инъекции – 254,6 мкм, после второй инъекции – 257,2 мкм).

Выводы: Применение препарата афлиберцепт способствует восстановлению структурной целостности макулярной области у пациентов с тромбозом ретинальных вен после однократного ( $p < 0,05$ ) и двукратного ( $p < 0,05$ ) введения.

**THE RELATIONSHIP BETWEEN OBESITY AND PLASMINOGEN ACTIVATOR INHIBITOR 1 TYPE PLASMA LEVELS IN PATIENTS WITH MILD TRAUMATIC BRAIN INJURY**

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Plasminogen activator inhibitor 1 type (PAI-1) is act as the principal inhibitor of fibrinolysis. It's secreted by adipose tissue. Moreover, the production of PAI-1 by adipose cells could be an important contributor to the elevated PAI-1 levels.

Our study was aimed to analyze the relationship between obesity and PAI-1 plasma levels in patients with mild traumatic brain injury (MTBI).

176 subjects have been examined. They were grouped into two categories: first group contained 81 patients with MTBI, second (control) – 95 almost healthy individuals. Patient in each group were subgrouped according to their body mass index (BMI) and waist-hip ratio (WHR). We checked their PAI-1 plasma levels on the 1, 3, 7 and 14 days after hospitalization.

During the 1<sup>st</sup> day study, higher PAI-1 levels were reported to have association with obesity and MTBI ( $75.7 \pm 6.81$ , normal body weight (NBW) –  $54.1 \pm 3.31$  ng/ml,  $p = 0.015$ ). Moreover, in the control group higher PAI-1 level were recorded in obese subjects ( $52.3 \pm 0.86$ , NBW –  $25.4 \pm 1.0$  ng/ml,  $p = 0.0001$ ) Thus, the association between obesity and increased PAI-1 level was still obvious on the 3<sup>d</sup> day study, levels of PAI-1 didn't change much in patients with MTBI. The analysis of PAI-1 levels in MTBI patients on the 7<sup>th</sup> day showed that the association remained significant between obesity and elevated PAI-1 level trending to decrease ( $70.1 \pm 7.73$ , NBW –  $46.9 \pm 2.87$  ng/ml,  $p = 0.005$ ). PAI-1 levels in the subjects with MTBI decreased slowly, independently of the

BMI and WHR. Analyzing PAI-1 level on the 14<sup>th</sup> day, it was recorded that in the patients with MTBI and NBW the PAI-1 level came within normal limits (according to the values in the control group); the patients with obesity and overweight still had high values –level of PAI-1 was 1.2 times higher than that in the control group ( $61.8 \pm 7.22$  and  $52.3 \pm 0.86$  ng/ml respectively,  $p=0.0001$ ).

According to the results of the study, we can make a conclusion as for the association between changes in the plasma PAI-1 levels and body weight: PAI-1 values were significantly higher in the patients and control with obesity than in the patients with NBW, thus we can suggest the influence of overweight and obesity upon MTBI course.

## COMPARISON BETWEEN POVERTY IN NIGERIA AND UKRAINE

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Poverty is such an important topic in the society and influences on the rate of progress of any nation.

Nigeria is a country in West Africa, 20<sup>th</sup> largest economy in the world worth more than 500 billion dollars. However the issue of poverty is still rising. This is due to the high rate of corruption in the political system, interethnic conflicts and inequality in income to mention but a few.

Ukraine is a country in Eastern Europe with the 46<sup>th</sup> largest population in the world and has an economy which is quite difficult to explain. From the year 2014 due to political crisis and conflicts on land ownership, the economy of the nation has suffered greatly. Solutions to the issues of poverty in the countries:

Creation of job opportunities. Job opportunities should be created with substantial wages to meet the needs of the people.

Improvement in political system. Routine investigations should be carried out to unveil hidden cases of fraud and misappropriation of funds by leaders and other people in power even in the financial sector.

Creation of Non-Governmental Organizations. They can reach out to the rural areas where poverty is higher and help out with any basic amenities which are lacking in the area.

Conflict resolution. Conflicts whether on a domestic (Nigeria) or international level (Ukraine) should be settled amicably without necessarily influencing on the economy of the nations.

Budgeting. Most importantly the country's funds should be allocated properly. Budgeting well would make it easier to hold people accountable in cases of failed duties.

Education. It will help encourage saving and also ensure a safety net for people in periods of crisis. Also formal education increases the workforce as people are equipped with skills and knowledge to survive in life.

In 2013 the human development index of Ukraine was 0,734, which is 0,032 more than in 1996 despite the political instability. It shows a positive influence of health care system reforms, that influence greatly on the index.

Having analyzed the above data it can be assumed that Ukrainian experience in health care reforms can be used in Nigeria. This experience with the above mentioned measures to improve the standard of living can increase the human development index (which is 0.504 for today) and to improve the quality of health care.

## ASSOCIATION BETWEEN SERUM URIC ACID AND TYPE 2 DIABETES

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The results of population-based studies suggest that serum uric acid (UA) is a strong and independent risk factor for diabetes complications. The aim of our study to investigate the association between serum UA level and type 2 diabetes (T2D).