



Уілка групи порівняння мали нормальний розподіл. Статистичну значимість відмінностей оцінювали за t-критерієм Стюдента для незалежних виборок. Дані представлені у вигляді середніх арифметичних та стандартного відхилення. Усі експериментальні дослідження та евтаназія тварин проводилися з дотриманням міжнародних принципів Європейської конвенції про захист хребетних тварин, які використовуються для експериментальних та інших наукових цілей (Страсбург, 1985).

У печинці щурів без ЦД 20-хвилинна каротидна ішемія з одногодинною реперфузією не впливає на показники фібринолітичної активності, а в селезінці – знижує всі види фібринолітичної активності, а також пригнічує лізис низькомолекулярних білків в обох досліджених органах. На 12-ту добу постішемичного періоду в обох органах тварин без діабету посилюється сумарна та неферментативна активність, лізис низько-, високомолекулярних білків та колагену. Також встановлено, що ЦД в обох органах в пізньому терміні спостереження усуває реакцію показників фібринолітичної активності, притаманну контрольним тваринам, обмежує реакцію протеолітичних систем на 12-ту добу змінами одного показника (порівняно з трьома в контрольних щурів) та спричиняє реверсію змін у ранньому постішемичному періоді.

СЕКЦІЯ 13 ОСНОВНІ НАПРЯМКИ РОЗВИТКУ СТОМАТОЛОГІЇ

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PECULIARITIES OF mRNA TLR-2, TLR-4 EXPRESSION OF THE ORAL CAVITY EPITHELIUM IN CHILDREN UNDER CONDITIONS OF CHRONIC CATARRHAL GINGIVITIS AGAINST DIABETES MELLITUS

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Epithelium of the oral cavity and TLR containing in them are under the effect of changes both in dental and general somatic pathology. TLR availability in the external membrane of neutrophils, macrophages, keratocytes was found to be a starting point in triggering inflammation in the periodontal tissues ensuring molecular reception of a pathogen with further involvement of important components in the inherited immunity. These effectors possess phagocytic and killer activities, ensure a number of signals activating and directing antigen-specific response by the cells of the adaptive immune system.

The aim of the study was to study mRNA TLR-2, TLR-4 in the epithelium of the oral cavity in children under conditions of chronic catarrhal gingivitis against diabetes mellitus considering metabolic disorders available.

We examined 30 children under conditions of chronic catarrhal gingivitis against diabetes mellitus by type I diabetes mellitus (I group), 30 somatically healthy children under conditions of chronic catarrhal gingivitis (II group) and 30 absolutely healthy children (III group). To analyze gene expression the method of polymerase chain reaction was applied with a reverse transcription in the regime of real time (RT-RRT). The object for molecular-genetic examinations by means of RT-RRT method was the buccal epithelium.

In children afflicted by diabetes mellitus the content of mRNA TLR-2 (90.0755) is in 5.5 times higher as compared to somatically healthy children under conditions of CCG – 15.1505. Expression of mRNA TLR-4 in children of I group increased 6 times as compared to the children from II group. Such results are evidenced by certain literary data and are indicative of an infectious genesis of inflammatory process in the periodontal tissues. Expression of mRNA TLR-2 in a considerable number of children of both experimental groups was high with a tendency to increase depending on the degree of severity of CCG in children afflicted by diabetes mellitus. Under conditions of mild degree of CCG in children with comorbid pathology the index was 44.1761, in somatically healthy children – 14.3251. Children with moderate degree of CCG severity were characterized by the following data: 112.9692 – in I group and 18.7071 – in II group. The highest data were found in children against the ground of comorbid somatic pathology under conditions of severe degree of CCG (113.3434). The level of mRNA expression of TLR-4 (Fig. 2) in children with the signs of mild degree of CCG against the ground of somatic pathology was 26.0951, and among somatically healthy children it was a little lower – 9.8618. Under conditions of moderate and severe degrees of CCG expression of mRNA TLR-4 increased in children with comorbid pathology as compared to somatically healthy children, 99.7132 and 103.5418 and 19.2791 and 19.8159 respectively.

The conducted molecular-genetic study of a relative level of mRNA TLR-2 and TLR-4 in the epithelium of the oral cavity was indicative of the fact that in children against diabetes mellitus relative levels of mRNA TLR-2, TLR-4 are considerably higher.

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GENERAL ANESTHESIA IN PEDIATRIC DENTAL PRACTICE

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For many children visiting a dentist and treating their teeth is quite a challenge. Fortunately, the equipment now is completely different from that which there used to be, even in public clinics. The importance of the child's first visit to the dentist is clear to doctors as well - in some dental clinics children receive small gifts and diplomas for