THE EFFECT OF THE FOOD ADDITIVE E171 (TITANIUM DIOXIDE) ON THE HUMAN BODY.

Azimova Z S
Rajabova N X
Bukhara State Medical Institute, Bukhara, Respublic Uzbekistan e-mail:zilol2006alixan@gmail.com,(90)6127000

Annotation: *Pediatric morbidity and diseases of the urinary system occupy second place after respiratory pathology. The increase in the incidence of nephropathies, the increase in primary chronic variants of the course, raises concern and indicates the need for further study of the etiology, mechanisms of development and progression of kidney diseases. The existence of a wide variety of causes leading to the occurrence of nephropathies makes it difficult to resolve the issue on the choice of adequate etiotropic and pathogenetic therapy, assessment of the effectiveness of treatment methods. The food coloring chosen as a food factor was titanium dioxide, which is widely used in the production of beverages.*

Key words: *food dyes, kidney diseases, titanium dioxide.*

Purpose of the study: to improve the diagnosis and prognosis of the risk of development and progression of nephropathies based on an in-depth clinical and experimental study of the role of phospholipid metabolism under the influence of food dyes.

Materials and methods of research: The experiment was carried out on rats - females and males. Female rats received titanium dioxide (in doses allowed by standards for use in the food industry) for 3 months. The rats were kept under standard vivarium conditions.

Some rats (7 females from the main group and 7 females from the control group) were placed with males. Some of the rat offspring were removed from the experiment at the age of 1 month (equivalent to childhood), and some at the age of 2 months (equivalent to adolescence). Control groups - intact animals of the same age - received 1 ml of physiological solution.In the group of children with glomerulopathies, there were more older children, by gender - boys. In the group of children with pyelonephritis, the boys/girls ratio depended on the age group (as the age of the patients increased, the percentage of girls increased). The above allows us to assume that such reasons may be food products containing certain dyes and stabilizers.All obtained digital data were processed using statistical research methods.

Results of the study: As a result of an experimental study, in the blood serum of 1-month-old offspring of the main group, compared with the control group, the level of β-globulins was increased with a significant decrease in the level of albumin, which can be regarded as a nephrotic type of proteinogram.

Conclusions:

1. Based on the results of the study, it can be assumed that the influence of nutritional factors acting on a person throughout life acts as toxic and xenobiotic agents that cause damage to both kidney glomeruli and tubular epithelium, which leads to the

development of more intense (but defective) regeneration of the kidneys with a decrease in their functionality.

2. The prenatal onset of damaging factors greatly aggravates the negative impact, since during the period of embryophetogenesis the formation of renal structures is disrupted.

3. Synthetic food additives in modern living conditions are a risk factor for the development of nephropathies in children.