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ASSESSMENT OF THE PATHOGENETIC SIGNIFICANCE OF AGE, GENDER AND OTHER RISK FACTORS IN THE DEVELOPMENT OF NEPHROPATHIES IN PATIENTS WITH OBESITY AND BRONCHIAL ASTHMA COMORBIDITY

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Abstract. Obesity and bronchial asthma are common chronic diseases in modern medicine, which often occur as comorbidities. These pathologies negatively affect various organ systems, including the kidneys, through metabolic, immunological and inflammatory processes. Recent epidemiological studies show that patients with a combination of bronchial asthma and obesity have a high risk of developing chronic kidney disease and nephropathies [2,5]. This article analyzes the pathogenetic significance of age, gender and other risk factors in the development of nephropathies in patients with comorbidities of obesity and bronchial asthma.

Keywords: bronchial asthma, obesity, nephropathy, chronic kidney disease, comorbidity, cystatin-C, NGAL.

Introduction. Chronic kidney disease (TBD) global health storage system important from problems one is considered. Research according to this disease world population approximately 10–13 percent occurs [4]. In the development of SCD metabolic syndrome, arterial hypertension, diabetes and obesity main danger factors is [13].

Obesity last ten in years sharp exceed going metabolic from diseases one Obesity with related metabolic changes insulin resistance, lipid metabolism in the body violation and chronic inflammation processes This processes kidney glomeruli excess loading to fall take comes and time passing with glomerular filtration system to injury reason will be [1,7].

Bronchial asthma and chronic inflammation with respiratory illness to be, to be pathogenesis immune system important role plays. Asthma with sick interleukin-6, TNF- α in patients and other mediators level increases [2]. This mediators in the body systematic inflammation process strengthening and affecting various organ systems impact to show possible.

Clinical studies bronchial asthma with sick in patient's chronic kidney disease development probability high that [5,9] showed that. Therefore, obesity and bronchial asthma comorbidity there is in patients' nephropathies development mechanisms study important scientific importance has.

Obesity and nephropathy between pathogenetic dependency

Obesity with related kidney diseases often called **obesity-related** glomerulopathy. This pathology glomerular hypertrophy, mesangial proliferation and tubulointerstitial fibrosis with described [7].

Obesity in the body following pathophysiological processes to the surface brings:

- insulin resistance
- dyslipidemia
- chronic inflammation
- oxidative stress

This factors kidney in the glomeruli intracapillary pressure to increase take comes. As a result, glomerular filtration system will be damaged and proteinuria develops [13].

Obesity with sick cystatin-C levels in individuals increase This biomarker is observed in the kidney. filtration decrease early from the signs one is [11].

Bronchial asthma and kidney injury

Bronchial asthma with sick in patients systematic inflammation process This is observed. process interleukin-6 and other mediators divorce with related [2].

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Inflammation mediators following changes to the surface brings:

- endothelial dysfunction
- oxidative stress
- microcirculation violation

As a result, kidney in tissues metabolic activity will break and nephropathies development probability increases [5].

Some in research bronchial asthma with sick in patient's chronic kidney disease development danger noticeable at the level high that identified [9].

The age factor pathogenetic importance

Juvenile nephropathies development important risk factors Age increase with kidneys filtration ability slowly decreases [8].

Studies from 40 years old then glomerular filtration speed per year decrease by an average of 1 ml/min shows [10].

Gender factor role

Sexual differences also kidney diseases to develop impact shows. Some in research Development of SBK in men danger to women relatively higher that identified [14].

This includes the following: factors reason to be possible:

- testosterone metabolic impact
- heart and blood vein diseases high meeting
- metabolic syndrome more observation

In women and menopause from the era then estrogen levels decrease kidney tissue protection mechanisms weakens.

Modern laboratory diagnostics

Nephropathies early in determining modern laboratory markers important importance has.

Creatinine and eGFR — kidney function evaluation main indicators is [8].

Cystatin-C — kidney filtration decrease to creatinine relatively early determination opportunity gives [6,11].

NGAL — tubular of injury sensitive from biomarkers one is considered and kidney damage early in stages determination opportunity gives [12].

Conclusion. Obesity and bronchial asthma comorbidity there are in patients' nephropathies development danger high This is in process age, gender and metabolic factors important pathogenetic role plays.

Kidney damage early determination for cystatin-C, NGAL and microalbuminuria such as modern laboratory from markers use important importance has [3,15].

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