The health and well-being of people today are influenced by many factors that are determining. Studies show that the main risk factors for cardiovascular diseases, often occur in childhood, are relatively stable, since their presence is confirmed by repeated studies conducted in an adult state.

The purpose To evaluate the role of medical-biological factors in the development of cardiomyopathy in children

Materials and methods The study involved 86 patients with diagnoses of hypertrophic, dilatation and restrictive cardiomyopathy, who were hospitalized in the cardio-rheumatology department of the Republican Specialized Scientific and Practical Medical Center of Pediatrics, the Republican Children’s Multipurpose Medical Center of the Republic of Karakalpakistan. The diagnosis was made on the basis of complaints, anamnesis data (obstetric history of the mother, history of the child’s life and illness, hereditary predisposition, past diseases, nature of the course and duration of the disease), clinical and functional (ECG, EchoCG), laboratory examination methods.

Results The study of biomedical factors contributing to the development of cardiomyopathy in children has shown that the disease is sex-related and is more common in boys (60%). In 10% of patients with CMP, the age of mothers was over 35 years old at the time of birth of this child. Nearly related marriages were registered in 25% of cases, hereditary burden in 7.5% of patients. Studies have shown that one determinant that has a significant impact on the development of the CMP is also the burden of obstetric history of mothers. Thus, the study of obstetric history of mothers indicates the birth of premature babies, the presence of stillbirths, miscarriages in early pregnancy. This pregnancy proceeded against the background of anemia and pre-eclampsia of the first or second half of pregnancy. Most of the mothers suffered from extra-genital diseases, among which were more frequent kidney and heart diseases (chronic pyelonephritis and carditis), allergic reactions. The number of mothers who had ARI during pregnancy was 85%. The debut of the disease was associated with sudden cardiac arrest in 3.3% of the child; syncopal state during physical exertion in 6.67% of children and with postponed carditis in 13.3% of children.

Thus, among the biomedical factors that influence the development of cardiomyopathy the most closely related marriage, hereditary predisposition, obstetric history and unfavorable pregnancy, the presence of extra-genital diseases in the mother, the age of the mother over 35, and childhood diseases of viral etiology are most significant.

P59

RELATIONSHIP BETWEEN ORAL HEALTH AND HYPERTENSION IN ADOLESCENTS


10.1136/archdischild-2019-epa.414

Aim to characterize oral health in adolescents with hypertension and evaluate presence of significant associations between hypertension and main dental diseases.

Methods A case-control study was conducted. A total of 130 subjects aged 10 - 17 were included in the study. The group of ‘cases’ included 65 adolescents with hypertension, verified by ABPM, and control group included the same number of adolescents with normal blood pressure levels, compatible by sex and age. All adolescents underwent anthropometric measurements with BMI calculation, dental examination (caries intensity index, gingivitis index, complex dental plaque index, oral hygiene index). Binary logistic regression, adjusted for BMI z-scores and oral hygiene indexes, was used to assess the relationship between hypertension and presence and severity of oral diseases in adolescents.

Results Frequency of dental caries and periodontitis was higher in the group of adolescents with hypertension in comparison with the controls (76.9% vs. 49.2% for caries, and 40% vs. 9.2% for periodontitis, p=0.001 for both). Signs of moderate to severe gingivitis were noticed in 18.5% adolescents with hypertension and only in 3.1% adolescents from the control group (p=0.009). Poor oral hygiene was detected in 43.1% adolescents with hypertension and in 21.5% adolescents from the control group (p=0.002). Presence of hypertension was significantly associated with caries and periodontitis, but not with gingivitis in adjusted regression models (OR 3 [1.3 – 7.1], p=0.012 for caries, and OR 3.9 [1.4 – 10.5], p=0.007 for periodontitis). Moreover, hypertension was associated with more severe damage of periodontium (OR 3 [1.6 – 5.6], p=0.001).