



TO THE EPIDEMIOLOGICAL FEATURES OF CONGENITAL NEUROSURGICAL ANOMALIES OF DEVELOPMENT IN THE SAMARKAND REGION OF UZBEKISTAN

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Actuality of the work: Congenital neurosurgical developmental anomalies (CNSDA) of the central nervous system (CNS) - hydrocephalus, craniocerebral and spinal hernias, craniosynostosis is the most important problem of modern medicine due to their comparative frequency, a significant level of disability and mortality (1, 2, 5, 7, 9, eleven).

The prevalence of many non-communicable diseases has been studied quite deeply (3, 6, 8), while the frequency of CNSDA CNS has not actually been studied. Meanwhile, the development of effective ways to reduce the medical and social consequences and prevent diseases requires studying the factors that contribute to their occurrence and prevalence.

Along with these aspects, the question of the pathogenetic role of various environmental hazards in the development of CNSDA CNS arises with all acuteness. First of all, these are the conditions and place of residence of the population, negative technological working conditions with their adverse effects on the immune system and metabolism for both parents and children themselves (2, 4, 9, 10). It requires studying the adverse impact on the body of the fetus and newborn of socio-eco-biological factors, including extragenital diseases of the mother and hereditary burden (1, 5, 7, 9, 10, 12).

The great medical and social significance of this problem in improving the gene pool of the population of any state, the need to solve these problems, as well as the lack of unified conceptual principles in the system of causes of occurrence, spread, prevention of complications, treatment and prevention of these neurosurgical diseases determined the main focus of this study.

The aim of the study is to study the distribution of the main congenital neurosurgical developmental anomalies, taking into account the impact of environmental and premorbid factors.

Material and research methods: The study is based on the analysis of 701 cases of patients with various forms of hydrocephalus, craniocerebral and spinal hernia, cranioostosis, who were examined and treated at the clinic of neurosurgery of the Samarkand State Medical University, in the children's neurosurgical department of the multidisciplinary clinical regional hospital, in the maternity hospitals of Samarkand and the central hospitals of Urgut, Ishtykhan and Koshrabad districts of the Samarkand region.

The research methods were clinical-neurological, epidemiological, statistical, intensive-population (in ppm calculations), CT, MRI, echo-EG, EEG, craniography, spondylography.

Research results and discussion. For 10 years, 701 patients with CNSDA were observed, of which 410 (58.5%) were boys, 291 (41.5%) girls living in the above settlements, aged from 2 days to 12 years.

The main object of studying the prevalence of these developmental anomalies were persons registered in medical institutions (maternity hospital, neonatological, pediatric and neurosurgical departments of hospitals) in the industrial city of Samarkand and rural areas of the region: tobacco-growing Urgut, cotton-growing Ishtykhan and livestock-breeding Koshrabad districts, the main statistical unit of observation was the case developmental anomalies.

Based on a population study in the Samarkand region, it was revealed that the frequency of congenital neurosurgical developmental anomalies during the study period in Samarkand was 2 cases per 1000 born children (2 ‰), in the tobacco-growing Urgut region - 1.5 ‰, cotton-growing Ishtykhan - 1.2 ‰, livestock breeding Koshrabad - 0.9 ‰. All types of these developmental anomalies were most often observed in the city, where 1.1 out of 1000 births were children with hydrocephalus (1.1 ‰), 0.4 ‰ - craniocerebral and spinal hernias, and 0.5 ‰ - cranioostosis.

The frequency of craniocerebral and spinal hernias in the city was 0.4 ‰, significantly more than in the tobacco and cotton growing regions (0.3 ‰ each), 2 times more often than in the livestock region (0.2 ‰). The same trend is observed in the prevalence of cranioostosis in the indicated objects of study (0.5 ‰, 0.3 ‰, 0.3 ‰ and 0.2 ‰, respectively), which, however, slightly exceeded the total specific gravity of craniocerebral and spinal hernias in all studied areas. Urban children with the indicated malformations were hospitalized relatively early in neurosurgical departments, with some delay, children from tobacco and cotton growing and very late from livestock areas were hospitalized.

Among CNSDA CNS, more than half (52.6%) were children with hydrocephalus, of which 83.5% (308 patients) were open-communicating, 16.5% (61) closed-occlusive

hydrocephalus. After hydrocephalus, children with cranioostosis (25.5%), with spinal (17.7%) and craniocerebral hernias (4.2%) followed.

In order to determine the impact and relationship of negative factors on children with CNSDA, we conducted an in-depth analysis by interviewing, clinical examination using additional research methods and involving specialists (therapist, obstetrician-gynecologist, pediatrician, ENT, etc.) of 362 mothers (164 urban and 198 villagers), whose children were hospitalized in neurosurgical departments during the study period.

One of the risk factors - related marriage among all respondents was found in almost every third (30.0%), meanwhile, it was registered mostly often (54.5%) among women living in the tobacco-growing area, followed by cotton (42.4%) and livestock (39.3%) regions. Among urban residents, the proportion of consanguineous marriage was significantly low (10.9%), occurring in every tenth of the respondents.

It should also be borne in mind that 265 (73.2%) of the women surveyed had frequent births (the interval between births was from 1 to 2 years), a significant number of children (68.2%) with CNSDA CNS were born from the second or third birth.

Among the extragenital diseases, the leading place was occupied by anemia, revealed more than in every second respondent (51.9%). However, unlike consanguineous marriage, it was most often observed among residents of the cotton-growing region (70.0%), further, in tobacco-growing (63.6%), livestock-breeding (60.1%) regions and significantly less (39.1%) in the city.

Cardiovascular and pulmonary diseases were observed in every fourth (26.5%) of the interviewed women, with a predominance also in the cotton-growing (36.3%) and tobacco-growing (33.3%) regions. Among the surveyed women living in the livestock area and the city, these diseases were somewhat less common (24.2 and 20.7%, respectively).

Diseases of the gastrointestinal tract and genitourinary system also occurred in almost every fourth (23.7%) of the interviewed and examined women, almost evenly among the residents of the city (25.6%), tobacco-growing (24.2%) and cotton-growing (27.2%). %) districts, relatively less in the livestock (15.1%) district. Diseases of the ENT organs out of the total number of those surveyed occurred in every fifth (20.9%) of the respondents, while they were found more often than others among women living in cotton-growing (33.3%) and tobacco-growing (27.2%) areas, significantly less among women of livestock (18.1%) district and city (14.6%).

Of the total number of women surveyed, 28 (7.7%) had infectious hepatitis during this pregnancy, the latter dominated among residents of cotton-growing (15.1%) and tobacco-growing (9.1%) regions. Among the residents of the city and the livestock area, the share of hepatitis was significantly low (6.1 and 3.0%, respectively).

The threat of termination of this pregnancy was more common (30.3%) in the tobacco-growing region; in other objects of the study, it was observed in almost every fifth respondent. Preeclampsia of the first and second half of pregnancy, in contrast to the previous factors, prevailed in the city (52.4%), according to the specific weight, urban women were followed by women living in tobacco-growing, cotton-growing and livestock-growing areas (respectively 48.4%, 42.4% and 27.2%).

Conclusions:

1. The prevalence of congenital neurosurgical anomalies in the development of the central nervous system depends on the dominant direction and nature of production - in the industrial city of Samarkand, their frequency is 2 ‰, in the tobacco-growing region - 1.5 ‰, in the cotton-growing region - 1.2 ‰, in the livestock-breeding region - 0.9‰.

2. Among congenital neurosurgical developmental anomalies, hydrocephalus dominates in terms of specific gravity, the prevalence of which in the city is 1.1‰, in the tobacco-growing region - 0.9‰, in the cotton-growing region - 0.6‰, in the livestock-breeding region - 0.4‰. Craniostosis follows hydrocephalus in frequency, the prevalence of which according to the objects of study corresponds to 0.5‰, 0.3‰, 0.3‰ and 0.2‰. The prevalence of craniocerebral and spinal hernias in the aggregate in the city is 0.4‰, in the tobacco and cotton growing regions - 0.3 ‰, in the livestock region - 0.2 ‰.

3. Congenital neurosurgical anomalies in the development of the central nervous system arise as a result of the negative effects of exogenous and endogenous factors. Endogenous risk factors (family marriage, frequent childbirth, anemia, cardiovascular and pulmonary diseases, diseases of the gastrointestinal tract and genitourinary system, diseases of the ENT organs, infectious hepatitis, the threat of abortion, preeclampsia of the I-II half of pregnancy) dominate among women living in tobacco-growing and cotton-growing areas, compared with those living in the city (with the exception of gestoses) and livestock-growing areas.

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