



Iatrogenic Pathology in the Practice of a Neonatologist

1. Kuziev Ulugbek Samandarovich

2. Ruziev Sherzod Ibodullaevich

Received 2nd May 2023,

Accepted 3rd Jun 2023,

Online 20th Jul 2023

^{1,2} Urgench Branch of the Tashkent
Medical Academy, Tashkent Pediatric
Medical Institute

Abstract: The problem of iatrogenics has become relevant not only in adult practice, where self-treatment takes place, but also in neonatology and pediatrics. Children developed diseases and pathological conditions caused by the unreasonable prescription of pharmaceutical preparations. They are the result of the side effects of drugs, their components, impurities, and unwanted combinations of drugs. In the absolute majority of cases, they require additional medical correction, and in some cases they can lead to serious health problems and a decrease in the quality of life. Providing medical care is a complex form of professional activity. It requires deep special knowledge, practical skills, and high spiritual qualities. However, a medical worker can be wrong, because he is dealing with the most complex object of nature the human body, especially the body of a child.

Key words: neonatal clinic, syndromes, atrogenics, medical care, medical expert.

Introduction. In the neonatal clinic, iatrogenic lesions were identified in 41% of newborns with very low birth weight (cardiac tamponade and thrombosis associated with long lines; perforation of vessels, stomach, esophagus; pneumothorax; cholestasis associated with total parenteral nutrition). In 14% of dead children of the neonatal period, iatrogenic injuries were the main cause of death (elder d.e., zuccollo j.m., 2012).

So, iatrogenics is a group concept that unites all the variety of adverse consequences (nosological forms, syndromes, and pathological processes) of any medical effects on the patient, regardless of the correctness of their execution [4]. Pay attention to the last phrase of the definition: "regardless of the correctness of their execution", In our opinion, this is a very important point.

Perinatal damage to the CNS deserves special attention in perinatal practice. Their frequency is so high that more than half of newborns are discharged from maternity hospitals with a diagnosis of hypoxic-ischemic CNS damage of varying degrees, and even more children with a similar diagnosis are observed and treated by a pediatric neurologist. In other countries, the proportion of such children is incomparably small. What is the reason for this? Apparently, there are reasons both from the obstetric side for aggressive tactics of childbirth, and from neonatologists and pediatricians, including pediatric neurologists who are fond of this diagnosis, in some cases taking some borderline conditions in the neonatal period for CNS lesions (chin tremor, tremor hands, physiological strabismus, etc.).

Thus, the relevance of this dissertation research is determined by the need to analyze manipulative DMP, which should help both prevent their occurrence during surgical interventions and improve forensic medical expert practice in relation to admitted defects in medical care.

The occurrence of iatrogeny is an important medical, social, economic and ethical health problem [3,4,7,10]. The introduction of new diagnostic and treatment methods in neonatology has increased the effectiveness of medical care for newborns and, at the same time, led to an increase in iatrogenic pathology [1,4,7,9,10].

The mention of the inaction of the medical staff requires special attention (A.V. Smolyannikov called it iatrogenic with a negative sign). Inaction is associated not only with a lack of knowledge or experience of a doctor, but sometimes with a lack of necessary means or conditions in the arsenal.

Preventive examinations, inoculations, and vaccinations create a situation where iatrogenicity extends not only to the sick, but to all healthy children without exception. Complications in this case can cause acute reactions, in which almost no one is to blame. They are the inevitable downside of medical impact.

Iatrogenicity is divided into three types.

1. Unnoticed iatrogenic. For example, a child taking a drug at a dose ten times the age limit is accompanied by severe symptoms, which were interpreted as individual incompatibility. The deviations disappeared after taking the medicine.
2. The observed and accompanied complications of iatrogenesis are observed frequently. Bladder and urethra affections from mistaken use of caustic preparations. Damage to the urethra during catheterization of the bladder. Urethral burn during electrocoagulation of urethral valves.
3. Iatrogenic with a sad outcome. Register for sections.

The prerequisites that contribute to the occurrence of iatrogenic lesions primarily relate to the insufficient consideration of anatomical and physiological features, primarily tissue ones. Wound dehiscence, rough scars, and stenoses arise not only as an inevitable consequence of intervention, but more often as a result of violation of the rules of atraumatic technique.

Particular attention is now being drawn to methods of antenatal intervention : amniopuncture, amniocentesis, amnioscolia and intraureteral effects on the fetus, aimed at unloading the dilated pelvis or bladder, leaving permanent drainage in them. The development of such procedures is accompanied by a high risk of miscarriage, which imposes a moral responsibility on the specialist, even at the highest level of his professional skills.

Materials and Methods. Distribution of Jagrogenia depending on its type.

1. Medical iatrogenic most of the reactions associated with a formally correct but individually toxic dosage of the drug may pass by the attention of parents and staff because toxicosis, vomiting, convulsions, etc., are naturally attributed to the underlying disease or its atypical course. The combination of several medicines, prescribed according to strict indications, can not only stop, but also aggravate the main suffering. A special place is occupied by adverse reactions to chemotherapy. In urology, the use of X-ray contrast drugs, medications, and antibiotics is often accompanied by complications and requires immediate assistance. The wide variation in individual sensitivity and the complete absence of subjective symptoms complicate the position of the doctor. In adults or older children, time for the provision of benefits is gained due to complaints (chest tightness, shortness of breath, headache, rush of blood to the head, etc.), in a small child, collapse, shock, convulsions, and hyperthermic reactions are recorded much later.

2. Manillatory iatrogeny is increasing, mirroring the technological progress of medicine, especially its invasive and endoscopic methods. Staying in the vascular bed of a child with plastic pediatric surgery, anesthesiology and resuscitation tubes for the purpose of infusion of drugs and bacteriostatic agents in and of itself can become a source of a septic process. Flora, circulating in the bloodstream, finds a starting point in a plastic foreign body, or more precisely, an artificial focus of sepsis. In the structure of thanatogenesis, manipulation - induced iatrogenesis occupies a leading place.

3. Resuscitation and anesthesia iatrogeny is the most dangerous. Resuscitation and pain management are combined because many procedures in pediatric intensive care units are performed under general anesthesia. Most anesthesia is carried out in operating rooms and dressing rooms. Any impact on a seriously ill patient is associated with the possibility of causing harm to him. The resuscitator is constantly forced to weigh what is more dangerous for the child: the use of this technique or its rejection. It is in resuscitation that the characteristic of iatrogenesis as an unintentional and inevitable complication or even harm is most often manifested. An example is the use of super-large doses of hormones, which in critical situation have a positive effect. It cannot be denied that in some cases, with a certain child's endocrine status, such a dose can be fatal. But this does not mean the possibility of abandoning the hormone therapy that is saving the vast majority of patients. Until such time as a more powerful and safer remedy is found.

Many of the routine techniques adopted in the intensive care unit, the use of modern multi-component general anesthesia, have a potential danger to the patient. The use of means of short, long, and sometimes multidirectional action - when the result of anesthesia is determined by the rate of administration of the drug, as they say "at the end

The frequency of iatrogenic episodes in intensive care, resuscitation and anesthesiology gives grounds to take care of equipping and providing these units in the first place.

4. Nutritional iatrogenics is attracting attention in connection with the study of risk factors. The high mass of the child is mainly a social phenomenon associated with the low sanitary culture of the parents. Advice given by medical personnel who are not sufficiently informed in scientifically based age-related diets leads to irrational nutrition, which determines the immediate and long-term adverse effects. First of all, I mean the southern and Central Asian republics, where national traditions are far from rational. Note that according to the American Cancer Society, in adults, poor nutrition ranks first among the risk factors.

Urological patients, especially after surgery for urolithiasis, and renal insufficiency, do not always receive sufficiently complete and reasonable recommendations on diet, even more often parents do not always listen to these recommendations and do not follow them.

Radiation iatrogenesis is associated with both natural and artificial factors. Advice regarding the use of solar insolation by children in official recommendations is given quite reasonably. However, in the southern latitudes, the characteristics of a given geographical zone, the height of the territory above sea level, where the child is (newcomer or native), his age, and, finally, the degree of protection of the skin by various types of clothing are not always accurately taken into account. Today, the changes that have arisen in the qualitative composition of the solar and cosmic radiation load, which require increased caution, have not been sufficiently studied.

Surgical iatrogeny for many decades was most fully covered in the analysis of errors, dangers, complications and misfortunes, which is the subject of a significant number of monographs and guidelines. Factology is concentrated in sections of journals devoted to these issues. In our country, the glorious traditions of self-critical analysis of the mistakes made come from N.I. Pirogov, who set an example of exposing his own omissions in order not to repeat them. In pediatric urology, iatrogenic complications are associated not only with the level of professional skill of the doctor, but also with

the conditions in which they work. Anastomosis in a premature baby will disperse much less often if it is sewn with thin absorbable synthetic threads on an atraumatic needle. Nursing of newborns weighed down by risk factors is more reliable in the presence of monitors, advanced incubators, disposable systems and needles for infusions. Their presence, when they are produced in sufficient quantity and quality, will greatly improve the results and reduce iatrogenicity.

The listed six types of iatrogenesis raise a natural question about the possibility of taking them into account. The past decade has shown the low reality of even approximately reliable indicators.

The prevention and reduction of iatrogenics is determined by the general rise in health care in the country. First of all, we note the improvement in the conditions and organization of work of medical workers, the creation of a material and technical base for healthcare. Equally important is the time savings traditionally wasted on documentation and unprepared meetings. A new way of thinking will not come immediately, but only by mastering it is it possible to understand the old and eternal truths that have suffered from the devaluation, such as mercy, selflessness, patience, kindness, which childhood needs. The professional level of a doctor is inextricably linked with daily intensive self-learning, self-control, self-critical and open assessment of miscalculations and mistakes.

Improving the personal qualities of the members of our medical corporation will largely be determined by the requirements for applicants for medical universities: objectively confirmed knowledge, abilities, ardent love for work and nothing more. The importance of the concept of iatrogenics requires that iatrogenics, which has assumed the character of an epidemic, be included in the curricula of medical institutes along with deontology and be included in textbooks and manuals in pediatrics and related fields.

The fulfillment by doctors of their heavy duty is possible only with the rehabilitation of the high prestige of our profession, its material support, which is already being implemented and gives reason to look with optimism at the prospects for reducing iatrogenesis and improving care for children.

The newborn is completely defenseless. His mother, who is in the maternity hospital, his father and older relatives are not able to help in cases of need to make a responsible decision. The absence of a clear position of relatives puts the doctor in the position of a person who alone decides the fate of the child, which in many cases is very difficult. An example is the case of multiple concomitant malformations, a simultaneous operation is accompanied by a high risk, the probability of death of the child is high. Multi-stage repeated operations over several months or years, with the expenditure of enormous efforts on the part of parents and physicians, do not allow us to hope for a favorable final outcome. The prognosis is more than doubtful. The choice of tactics requires high humanity and caution.

Advances in neonatal surgery have made it possible to approach catamnesis in a new way, which, when applied to urological suffering, has a peculiarity. The rapid growth and development of the newborn previously gave grounds to assume that the results achieved after 3-5 years can be considered final and sufficient for evaluating the results of the operation. However, experience has shown that a significant improvement in the first months and years was sometimes replaced by deterioration. For example, after surgery for urethral valves, hydronephrosis, or vesicoureteral reflux, a temporary improvement reflected only the restoration of the passage of urine, and subsequent deterioration indicated the exhaustion of the reserve capacity of the still deeply affected kidney in utero [10,11].

Conclusion. An analysis of the literature data shows that iatrogenic are crimes against human life or health committed by doctors as a result of improper provision or failure to provide medical care to citizens. The right to health and medical care is guaranteed by the Constitution of the Republic of Uzbekistan. In recent years, the problems of the quality of medical care have become increasingly important, especially with unfavorable outcomes in the provision of medical services. This is due to

the activity of citizens, the media and judicial and investigative bodies, especially in the event of complications and the development of undesirable results. In cases of complaints from patients or their relatives to law enforcement agencies or based on the results of verification work, a number of medical and legal issues are resolved by appointing forensic medical examinations. A special place is occupied by expertise in relation to obstetrician-gynecologists and neonatologists. When doctors are held legally liable for the improper performance of their professional duties, the investigation and the court face a number of special issues. The main ones are the correctness of diagnosis and treatment of patients and the presence of a causal relationship of severe outcomes from medical omissions.

BIBLIOGRAPHY:

1. Blanchemaison F., Grenay F. Atlas of the anatomy of the superficial veins of the lower limb: Saphenopopliteal anastomosis. -M.: Pharmaceutical group Servier, 2000. - 48 p.
2. Bykovsky V.A. Echography in abdominal pathology in children: Recording of research results. - M.: Realnoe Vremya, 2001.
3. Volkov A.E. Psychoemotional characteristics of women during pregnancy complicated by congenital malformations of the fetus // Medico-psychological aspects of modern prenatal and perinatal psychology, psychotherapy and perinatology. Materials V All-Russian. Congress on Perinatal Psychology. - M., 2005. - S.103-105.
4. Dorokhov R.N., Bubnenkova O.M. Asymmetry of the body, its characteristics and correction. //Children, sports, health (Issue 5). - Smolensk: SGAFKSiT, 2009. - C. 46-56.
5. Isachenkova I.P., Savchenko S.V. The case of maternal death with true placenta accreta // Bulletin of forensic medicine. - 2016. - V. 5, No. 3. - S. 58–60.
6. Kaminsky Yu.V., Neprokina I.V. Pacific honey. magazine 2002; 3:18-21.
7. A. I. Kirienko, V. M. Koshkina, and V. Yu. outpatient angiology. Guide for doctors. - M.: Litter Publishing House, 2007. - 328 p.
8. Kedrov V.S. On the terminology of professional offenses of medical workers // Prospects for the development and improvement of forensic science and practice: materials of the VI All-Russian Congress of Forensic Physicians (dedicated to the 30th anniversary of the All-Russian Society of Forensic Physicians). - M.; Tyumen, 2005. - S. 126-127.
9. Luzanova I.M. Inadequate care in obstetric practice (medical and legal aspects of the problem): author. for the competition cand. medical sciences - Moscow, 2007. - P.10.
10. Saprykin V.B. Medico-legal aspects of the provision of obstetric care / V.B. Saprykin, I.M. Luzanova // Modern approaches to the study and application of traditional and folk methods of improving the population: Proceedings of the Conf. Orenburg, 2014. - p.113-115.
11. Rykov V.A. Medical and legal assessment of iatrogenic diseases // Medical Law. - 2003. - No. 4. - S. 4147.
12. Sergeev Yud., Erofeev S.V. Iatrogenic pathology - an actual forensic problem // Forensic medical examination. - 1998. - No. 6. - S. 3-8.
13. Shadymov A.B., Kolesnikov A.O., Lyutikova N.I. Features of conducting commission forensic medical examinations on “medical cases” of obstetric and gynecological profile // Bulletin of forensic medicine. - 2012. - V. 1, No. 4. - S. 11–15. 10.
14. Baek, G.H., Chung, M.S. Methicillin-resistant staphylococcus aureus osteomyelitis of the scaphoid from a catheter in the radial artery //J. Bone Joint Surg. – 2002. – Vol. 84-B, N 2. – P.273 – 274.

15. Saidovich, Rakhimov Bakhtiyar; Kabulovna, Sobirova Sabokhat; Bakhtiyarovna, Rakhimova Feroza; Akbarovna, Allayarova Asal; Bakhtiyarovich, Saidov Atabek; ANALYSIS OF THE GRAPHICS PROCESSORS FOR MEDICAL PROBLEMS, PEDAGOGS journali, 11, 4, 167-177, 2022,
16. Rakhimov, Bakhtiyar Saidovich; Saidov, Atabek Bakhtiyarovich; Shamuratova, Inabat Ismailovna; Ibodullaeva, Zarnigor Ollayor Qizi; ,Architecture Processors in Data Base Medical Problems, International Journal on Orange Technologies, 4, 10, 87-90, 2022, Research Parks Publishing
17. Saidovich, Rakhimov Bakhtiyar; Musaevich, Yakubov Durumboy; Bakhtiyarovich, Saidov Atabek; Qizi, Saidova Zarina Bakhtiyar; ,ANALYSIS OF THE DEVICE FEATURES OF GENERAL-PURPOSE PROGRAMMABLE GRAPHICS PROCESSORS, CENTRAL ASIAN JOURNAL OF MATHEMATICAL THEORY AND COMPUTER SCIENCES, 4, 1, 100-103, 2023,
18. Wikstrom, A.K. The risk of maternal ischaemic heart disease after gestational hypertensive disease / A.K. Wikstrom, B. Haglund, M. Olovsson, S.N. Lindeberg//BJOG. 2005. -Vol. 112, N11.-P. 1486-1491.

