Volume 2, Issue 11, November 2024 ISSN (E): 2938-3765

THE ROLE OF THE MACROORGANISM IN THE MANIFESTATION OF PATHOGENIC PROPERTIES IN CONDITIONAL-PATHOGENIC MICROFLORA OF THE ORGANISM

Umarova T. A.
Assistant of the Department of Clinical Laboratory
Diagnosis with the Course of Clinical Laboratory Diagnostics of PGD

Kudratova Z. E.
PhD, Ass.Professor of the Department of Clinical Laboratory
Diagnosis with the Course of Clinical Laboratory Diagnostics of PGD

Allamurodova X.
Cadet of the Department of Clinical Laboratory
Diagnosis with the Course of Clinical Laboratory Diagnostics of PGD
Samarkand State Medical University Samarkand, Uzbekistan

Abstract
Some normal microorganisms of the macroorganism can, under certain conditions, cause subclinical and clinical manifestations of infectious diseases. Therefore, there is a growing need for a more detailed study of these microorganisms, the conditions that lead to the emergence of infectious diseases involving them, and the improvement of diagnostic, treatment, and prevention methods.

Keywords: infectious disease, normal microflora, pathogenic microorganisms, digestive tract, urinary system.

Introduction

A significant contribution to the study of infectious disease pathogens was made by Louis Pasteur (1822-1895), Robert Koch (1843-1910), and many other scientists. In the manifestation of pathogenic properties in normal microflora, the macroorganism itself plays a specific role. A decrease in the overall resistance of the organism leads to a reduction in the barrier functions of the mucous membranes of the digestive tract, urinary system, conjunctiva, and skin. There is a sharp decline in the production of immunocompetent cells, normal antibodies, nonspecific inhibitors, and so forth. Against this background, normal microflora, which has performed a protective function, can become pathogenic and cause an infectious process. Additionally, when pathogenic microorganisms enter the body, they can become agents of mixed infections. In newborn animals kept in crowded conditions (with poorly developed immune systems), the

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

passage of microorganisms through the macroorganism can also lead to the manifestation of pathogenic properties in normal microflora [1,2,3,4,5].

Starvation.This is one of the strongest factors that reduce resistance to infectious diseases. Systematic undernourishment usually leads to the emergence of mass diseases among humans and animals, both non-infectious and infectious. If feeds lack certain nutrients (an unbalanced diet) or if vitamins, macro-, and microelements are absent, the macroorganism itself promotes increased activity of the normal microflora. Adequate and sufficient nutrition enhances the body's resistance against infectious diseases caused by both pathogenic and conditionally pathogenic microorganisms.

Water Regimen. Insufficient water intake by animals leads to blood thickening and anhydremia. This condition disrupts the functioning of the cardiovascular system, central nervous system, kidneys, gastrointestinal tract, and reduces the organism's resistance to infectious diseases.

Temperature. Excessively high or very low temperatures can also reduce the organism's resistance to infection. Overheating leads to blood thickening with subsequent pathological signs. Hypothermia, especially in young animals, can result in cold and diarrheal diseases (such as pneumonia and gastroenteritis) that would not manifest under normal conditions [6,7,8].

Ionizing Radiation. Ionizing radiation has both local and systemic effects on the organism. With systemic effects, general weakness occurs, body temperature rises, and bleeding and hemorrhages appear in the skin, mucous membranes, gastrointestinal tract, brain, heart, and lungs. As a result of metabolic disturbances and dyspeptic disorders (loss of appetite, diarrhea), body weight decreases sharply. Leukopenia, thrombocytopenia, and anemia develop; the sedimentation rate of erythrocytes (ESR) increases. Hypoproteinemia, hypoalbuminemia, increased residual nitrogen, and reduced chloride levels are observed. The immune system is suppressed, leading to infectious complications such as auto-infections and auto-intoxications.

Fatigue.Overexertion of animals due to excessive exploitation can lead to a decrease in overall resistance. Many cases of latent infection exacerbation have been noted following intensive use of animals. For example: anthrax, equine infectious anemia, pasteurellosis, as well as infections caused by conditionally pathogenic microflora [12,13,14,15,16].

Stress.Weakening of higher nervous activity due to overstrain sharply reduces the organism's reactivity to chemical toxins, bacterial toxins, antigens, and the infecting effects of microbes and viruses. There are known cases of disease in cattle during transport caused by the parainfluenza virus - 3, also referred to as "transport fever."

Age. The age of animals plays a specific role in the emergence of infectious processes. There are diseases that only affect young animals. For example, colibacillosis occurs only in young animals in the first days after birth. Salmonellosis usually progresses acutely in young animals, while adult individuals may carry salmonella without any obvious clinical signs. Emphysematous carbuncle affects calves aged 3 months to 4 years [9,10,11].

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5

References

1. Набиева Ф. С., Мусаева Ф.Р. Лабораторная диагностика острого гломерулонефрита //Journal of new century innovations. – 2023. – Т. 30. – №. 3. – С. 150-152.
2. Жаббарова Д.З., Набиева Ф.С., Якубова Д. М. Применение иммуноферментного анализа в медицине //TADQIQOTLAR. - 2024. - Т. 46. - №. 1. - С. 40-42.
3. Чориева Т.А., Якубова Д.М., Набиева Ф.С. Диагностика и профилактика torch инфекции у беременных //Tadqiqotlar. - 2024. - Т. 46. - №. 1. - С. 26-30.
4. Mamatova M. N. Study of the biological properties of rabies by the method of diagnosis of the" gold standard" //Golden brain. - 2024. - Т. 2. - №. 4. - С. 129-144.
5. Kudratova Z. E. et al. Current modern etiology of anemia //Open Access Repository. – 2023. – Т. 10. – №. 10. – С. 1-4.
6. Burxanova D. S., Umarova T. A., Kudratova Z. E. Acute myocarditis linked to the administration of the COVID 19 vaccine //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 2. – №. 11. – С. 23-26.
7. Кудратова З. Э. и др. Атипик микрофлора этиологияли ўткир обструктив бронхитларининг ў зига хос клиник кечиши //Research Focus. - 2022. - Т. 1. - №. 4. - С. 23-32.
8. Kudratova Z. E, Normurodov S. Etiological structure of acute obstructive bronchitis in children at the present stage - Thematics Journal of Microbiology, 2023. P.3-12.
9. Kudratova Z. E., Tuychiyeva S. K. Atipik mikroflora etiologiyali o'tkir obstruktiv bronxitlar etiopatogenezining zamonaviy jixatlari. Research Focus, 2023, B. 589-593.
10. Kudratova Z. E., Karimova L. A. Age-related features of the respiratory system. Research Focus,Tom 2, P. 586-588.
11. Исомадинова Л. К., Даминов Ф. А. Современная лабораторная диагностика хронического пиелонефрита у детей //Journal of new century innovations. – 2024. – Т. 49. – №. 2. – С. 112-116.
12. Isomadinova L. K., Daminov F. A. Glomerulonefrit kasalligida sitokinlar ahamiyati //Journal of new century innovations. – 2024. – Т. 49. – №. 2. – С. 117-120.
13. Isomadinova L. K., Qudratova Z. E., Shamsiddinova D. K. Samarqand viloyatida urotiliaz kasalligi klinik-kechishining o'ziga xos xususiyatlari //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 2. – №. 10. – С. 51-53.
14. Isomadinova L. K., Qudratova Z. E., Sh B. F. Virusli gepatit b fonida Covid-19 ning klinik laborator kechish xususiyatlari //Journal of new century innovations. – 2023. - Т. 30. - №. 3. - С. 60-65.
15. Isomadinova L. K., Yulayeva I. A. Buyraklar kasalliklarning zamonaviy diagnostikasi //Центральноазиатский журнал образования и инноваций. – 2023. – Т. 2. – №. 10 Part 3. – С. 36-39
16. Kudratova Zebo Erkinovna, Tamila Abdufattoevna Umarova, & Sirojeddiova Sanobar. (2024). Modern types of immunoenzyme analysis methods old problems. Web of Discoveries: Journal of Analysis and Inventions, 2(6), 67–70.

Web of Medicine: Journal of Medicine, Practice and Nursing
webofjournals.com/index.php/5