

## REGULARITY OF THE SELECTION OF *SALMONELLA SPP* OF KHARKIV CITY, DEPENDING ON THE SEASON 2013

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**Introduction.** Salmonellosis can provoke the onset or exacerbation of other chronic diseases. The epidemiological situation regarding salmonella in most countries of the world and in Ukraine is currently assessed as unfavorable with a tendency for further deterioration.

**Aim.** The purpose of the work was to study the regularity of the selection of *Salmonella spp* among the inhabitants of Kharkiv city, depending on the season.

**Materials and methods.** The study of feces and emesis was carried out with a diagnostic and preventive purpose using microbiological methods of research

**Results and discussion.** In the course of research in 2013, four serovars - *serovar Enteritidis*. Were identified and identified. *Jena*, *S. enterica serovar typhimurium*, *S. enterica serovar tshiongwe*, *serovar montevideo*. For this grove, *serovar Enteritidis var. Jena* - 115 strains. Of these, in January there were 2 strains, in February - 2, in March - 7, in April - 11, in May - 15, in June - 18, in July - 22, in August - 19, in September - 9, October - 7, in November - 2, in December - 1. In 2013, *serovar typhimurium* - 84 strains was allocated. In January and February, this serovar was not determined, in March - 6, in April - 9, in May - 13, in June - 17, in July - 16, in August - 10, in September - 8, October - 3, in November and in December one strain, respectively. For this grove was allocated *serovar tshiongwe* - 95 strains. Of these, in January there were 2 strains, in February - 1, in March - 3, in April - 12, in May - 18, in June - 22, in July - 14, in August - 13, in September - 7, October - 1, in November - 2, in December this serovar was not determined. For this grove was isolated *serovar montevideo* - 90 strains. In January there were 2 strains, in February - 4, in March - 7, in April - 11, in May - 10, in June - 18, in July - 16, in August - 16, in September - 2, October - 3, in November - 0, in December - one strain was allocated.

**Conclusions.** Regarding the selection of *Salmonella spp* in the city of Kharkiv, depending on the season of the year, was as follows: an increase in the incidence of the disease was noted from the spring throughout the summer, the peak of the discovery could be marked by the interval from the end of April to the end of August.

## THE MODERN ASPECTS OF DIAGNOSTICS OF GARDNERELLOSIS

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**Introduction.** The main indicator of the health of women is the condition of the vaginal microflora, which is a dynamic system that responds to changes in hormonal and immunological status in various pathological conditions. In addition, the concept of health from the point of view of Microbiology is primarily associated with quantitative and qualitative composition of the normal human microflora. That is why a number of sexually transmitted infections, are treated essentially as disbioz. Among them the most common are genital candidiasis and bacterial vaginosis, the detection rate of which, according to different authors, varies from 20 to 80% in different groups of patients. Focusing on gardnerellas, it should be noted that this disease in women is always primarily a violation of normal microflora of the vagina.

Diagnosis of bacterial vaginosis (gardnerellosis) today has some problems. This is primarily due to the fact that the culture study of vaginal vdemo quantitative evaluation of main indicators of microbiocenosis is not widely spread in clinical practice because it has on one side a greater cost, complexity, and on the other the lack of a unified methodological approach. In most cases, diagnosis and treatment based on identifying a primary pathogen without regard to quantitative criteria, is not carried out microbiological control of effectiveness of treatment, the degree of disruption of the normal microflora and

the timing of its recovery. Therefore, the modern state of clinical diagnosis, especially of infectious diseases requires changes and improvements..

**Aim.** Given the long-term complications such as miscarriage, premature birth, reproductive system problems, improve diagnostics of gardnerellosis is very important.

**Materials and methods.** During the execution of the studies used microbiological (microscopy and bacteriology) and statistical methods. The object of the study was strains of microorganisms isolated from the vaginal branch of the women obtained from patients gardnerellosis. Identification of the causative agent on the basis of the morphology of the colonies, type of gram staining and negative reactions to catalase and oxidase.

**Results and discussion.** Modern gardnerellosis 25% of cases combined contamination with bacteria, fungi, chlamydia infection alters the clinical course of the disease and complicates treatment. The combination of gardnerellosis with different kinds of infections greatly aggravates not only the clinical status of the patients, but also a very difficult therapeutic strategy that dictates the need for multi-faceted use of the stage of treatment with a gradual morphological control of efficiency of complex therapy. Therefore, taking into account the above and features of *Gardnerella vaginalis* (absence of growth in simple nutrient media, requirements for cultivation conditions,  $pH > 4.5$ , increased concentration of carbon dioxide, possibility of loss of vitality outside the human body within 24 hours of sowing), a comparison was made between the usual 5% blood agar and the nutrient medium that contained: anaerobic blood agar with the addition of gentamicin sulfate, nalidixic acid and amphotericin B in adequate proportions and  $pH = 7.2-7.4$ . Meanwhile, cups of cows were compared after 24, 48 and 72 h. Evaluated the presence of growth, morphology of colonies, the nature of hemolysis. When comparing two nutrient media, it was found that on 5% blood agar, the growth of microorganisms was observed after 48-72 hours in the form of very small, non-colored colonies with characteristic beta-hemolysis. At the same time, in the other nutrient medium during the first day of cultivation, abundant growth was observed in the form of very small transparent colonies without or with weakly expressed hemolysis.

At microscopy, gram-negative or grammaribular short sticks were detected.

Preliminary identification was carried out in accordance with the following criteria:

1) assessment of the morphology of colonies - colonies small, gray and convex with or without a field of hemolysis;

2) Gram stain - On the smears from the environment, gram-negative and grammaribel polymorphic sticks with a rounded end that were arranged singly or in small groups were obtained.

**Conclusions.** On the basis of the study, it can be concluded that, for the selection of gardnerelles, an anaerobic blood agar with an addition of gentamicin sulfate, nalidixic acid and amphotericin B in an adequate proportions and  $pH = 7.2-7.4$  is a more favorable nutrient medium. The use of an experimental nutrient medium is most appropriate for scattering in order to provide a clean culture, the accumulation of biomass of the microorganism for further identification..

## HELMINTHIC DISEASES AND THEIR PREVENTION

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**Introduction.** Helminthiasis is an urgent problem of the present and it needs immediate solution.

Helminths have a general toxic effect on the body, cause mechanical damage to tissues and organs that can lead to death. They can parasitize in all tissues and organs of a person. But most often they are localized in the intestine.

**Aim.** The aim of the work: to reveal the most common helminthiasis among the population of Pervomaiskiy and Pervomaiskiy district; to carry out explanatory preventive work among the people on the problem of infection with common types of helminths and their prevention.

**Materials and methods.** The methods used: monitoring of helminthic invasions, general scientific methods, special methods, interdisciplinary methods.