

DIAGNOSTIC CRITERIA FOR INTESTINAL MICROBIAL LANDSCAPE IN CHILDREN WITH DYSPEPTIC DISORDERS

Fergana Institute of Public Health, Andijan
Medical Diagnostics (AMD), Uzbekistan

**Abduganiyeva A.Yo.,
Starseva N.V.**

The total biomass of microbial cells in the gastrointestinal tract (GIT) of an adult is on average 3-4 kg. About 450 species of microorganisms live in the gastrointestinal tract, and the total number of cells reaches 10^{14} , exceeding the number of cells in a macroorganism. Intestinal microflora is divided into protective, saprophytic, and conditionally pathogenic. The protective microflora, which forms the basis of intestinal microflora, is represented by anaerobes - bifidobacteria (10^8 - 10^{10}) and lactobacteria (10^6 - 10^8), which form a protective film on the surface of the mucous membrane, and by aerobes - *E. coli*, which has normal enzymatic properties (10^7 - 10^8).

These microorganisms provide colonial resistance - the stability of normal microflora and prevent the host organism from being colonized by foreign microorganisms. Saprophytic microflora is represented by epidermal and saprophytic staphylococci, enterococci, yeasts, neisseria, and other microorganisms, which under certain conditions can exhibit their pathogenic properties. The nutrient medium for saprophytes is the final products of the macroorganism's life activity. Conditionally pathogenic (opportunistic) microorganisms under normal conditions are normal inhabitants of the gastrointestinal tract, skin, and respiratory tract of humans, but under certain conditions, they can cause a pathological process. Currently, there is an increase in the number of diseases caused by conditionally pathogenic microorganisms. This group of microorganisms includes β -hemolytic

streptococcus, spore-bearing anaerobes, golden staphylococcus (*S. aureus*), *Candida* fungi, gram-negative enterobacteria (*proteus*, *klebsiella*, *E. coli* with altered properties, etc.), *Acinetobacter*, *Citrobacter*. In some children, conditionally pathogenic microorganisms can normally be found in the stool in quantities not exceeding 10^2 - 10^3 . The composition of the microflora in different parts of the intestines differs. In general, the largest number of various microorganisms is determined in the large intestine.

To identify the causes of dyspeptic disorders in children, 668 bacteriological fecal cultures were analyzed from May 1, 2020, to May 1, 2021, at the Andijan Medical Diagnostics Center. Standard bacteriological studies of feces were conducted to determine antibiotic sensitivity using the diffuse disc method. Thus, more than 85% of those examined were children under 1 year of age. At the same time, 485 individuals were diagnosed with *Staphylococcus aureus* (*Staph.aureus* 10^{-4} - 10^{-5}), 102 individuals with *Staphylococcus epidermidis*, while many patients had no normal intestinal microflora (*E.coli*), 45 patients had *Klebsiella* 10^{-6} , and the remaining cases had *Ps.vulgaris*, *St.pneumoniae*, and *Candida*. The following antibacterial drugs proved to be the most sensitive: gentamicin, levomac, polymyxin, ceftriaxone, and least sensitive - oxamp and roxibel.

Based on the foregoing, it should be noted that currently, there is an increase in the conditionally pathogenic flora of the intestines. Unlike older children and adults, in whom dysbacteriosis is always secondary and its main causes are antibacterial therapy and chronic gastrointestinal diseases, the development of dysbacteriosis in newborns and infants can be primary and is caused by factors such as intestinal dysbacteriosis, bacterial vaginosis in pregnant and nursing mothers, late breastfeeding, early artificial or mixed feeding, perinatal pathology, species microbial landscape, and the degree of environmental contamination.