

Vaginal microbial image

Vaginal microbial imaging (ILO) is one way of determining a number of sexually transmitted diseases. Secretion is collected with a sterile cotton swab with the help of vaginal mirrors from the vaginal mucosa and the cervix. The material is transferred to two slides and stained according to:

1. Gram - diagnostics of bacteria and yeasts;
2. Giemsa - diagnosis of the presence of trichomonads.

ILO	evaluation	discharge	microscopic image	note
ILO I	ILO healthy women	without discharge	Prevalence of epithelia and lactobacilli	It can be demonstrated only in a part of clinically completely healthy women
ILO II	Non-purulent microbial discharge, bacterial vaginosis	Milky, sometimes yellowish; variously dense and viscous consistency	<ul style="list-style-type: none"> ▪ No or minimal leukocyte count ▪ Number of bacteria (most often <i>Gardnerella vaginalis</i>) ▪ Lactobacilli are completely absent or only sporadically 	Presence of so-called "clue cells" - epithelial cells of the vaginal mucosa, to which a number of different bacteria adhere
ILO III	Purulent bacterial discharge	Dense whitish to yellowish discharge	<ul style="list-style-type: none"> ▪ Large number of polymorphonuclear cells ▪ Lots of different bacteria ▪ Lactobacilli are usually absent ▪ Relatively few epithelia 	Responsible mostly pyogenic bacteria - coliform rods, streptococci, staphylococci, enterococci...
ILO IV	Acute or chronic gonorrhoea	Dense yellow-white to yellow-green discharge	<ul style="list-style-type: none"> ▪ Acute stage - almost exclusively leukocytes with intra- and extraleukocyte-located G-diplococci, which look like coffee beans ▪ Chronic stage - even an admixture of other bacteria and a small number of epithelium, the prevalence of leukocytes is not as significant as in the acute phase 	Evaluation of the finding is difficult, the final diagnosis is based on repeated culture or PCR examinations.
ILO V	Trichomoniasis (<i>Trichomonas vaginalis</i>)	Thin, white, often foamy	<ul style="list-style-type: none"> ▪ <i>Trichomonas vaginalis</i> ▪ Epithelias, leukocytes ▪ Even lactobacilli and a mixture of different bacteria 	Stained according to Giemsa - <i>Trichomonas</i> cells often disintegrate, only purple-red nuclei (usually pointed in one place) surrounded by remnants of bluish cytoplasm can be observed
ILO VI	Vaginal candidiasis	Whitish discharge of various densities	<ul style="list-style-type: none"> ▪ Yeast (saprophytic and parasitic phase) ▪ Leukocytes may or may not be ▪ Lactobacilli and other bacteria 	Overgrowth due to hormonal fluctuations, weakened immunity (AIDS), antibiotic treatment, diabetes, etc.

Links

Related articles

- Vulvovaginitis

References

- ONDROVČÍK, Petr a Miroslav VOTAVA, Selected chapters from clinical microbiology. 1st edition. Brno: Masaryk University in Brno, 1998.