Analysis of D- Arabinitol – Diagnostic Identification of Systemic Candida Infection

Low concentrations of candida albicans can be found on human mucosa of mouth and throat, genital area and gastrointestinal tract. In case of weak immune systems or physiological bacterial flora disorders the fungus proliferates and leads to candidiasis.

With the aid of cultural methods it is not possible to identify – even in case of high bacteria counts – whether it is a regionally restricted process or already a systemic infection.

D-arabinitol is a characteristic metabolic product of candida species. While candida ssp. produces exclusively D-arabinitol, L-arabinitol is developed by the body’s own metabolism. D-arabinitol serum levels increase if candida yeasts proliferate within the organism and cause invasive Candidiasis.

Diagnostics
One way to diagnose invasive candida infections is the determination of D-arabinitol in serum or urine. Already in the 80s it was detected D-arabinitol could be used as valuable marker for diagnostic tests of invasive candidiasis. In the scope of prospective studies one found increased D-arabinitol/L-arabinitol ratios respectively D-arabinitol/creatinine ratios in immune-compromised patients with invasive candidiasis. In addition positive D-arabinitol values were observed a few days or weeks before positive blood cultures.
Aside from the gas-chromatographic determination there were so far no easily applicable tests. biovis now offers such an analysis for the determination of D-arabinitol in serum or urine.

Indications
This test is highly recommendable for immune-compromised patients with high candida concentrations in stool or on the mucosa of mouth and throat.
It is also indicated if in case of significant or recurrent genital mycoses, tumour diseases, diabetes, inflammatory gastrointestinal diseases and during/after cytostatic, immune-suppressive or broad-spectrum antibiotic therapies.

D-Arabinitol Test:
Sample Material: 1st Morning Urine
Self-pay Patients: 33.22 Euro
Private Patients: 38.20 Euro