

Urinary tract infection is triggered by the vaginosis-bacteria

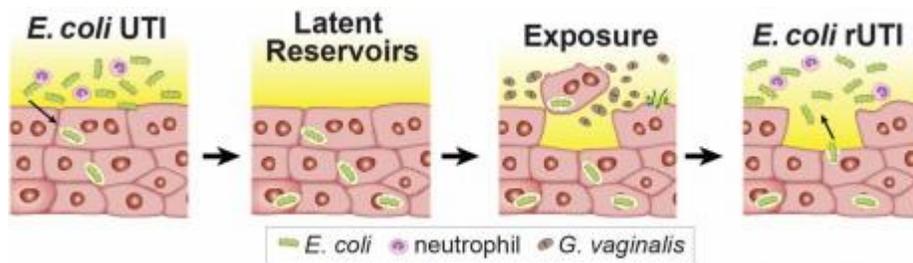
Millions of women suffer from recurrent urinary tract infection. The only available treatment is antibiotics, which contribute to the increasing and threatening antibiotic resistance among pathogenic bacteria.

It is recognized, that the problem is caused by the *E. coli*- bacteria establishing a reservoir in the bladder lining, where they are well hidden and protected. Previously the factors that awake the *E. coli* bacteria and cause a new painful attack were not known. An American group of scientists has shed light over this question.

The scientists are working with mice – a recognized model for humans in this area. Mice with latent *E. coli* infection were produced. By exposing the bladder in these mice shortly with *Gardnerella vaginalis* the urinary tract infection was provoked. The trial also showed, that the exposure with *G. vaginalis* induces exfoliation (dissolving) of the bladder wall. It is obvious, that this can liberate hidden *E. coli* bacteria. Also related to cervical lesions it is established, that *G. vaginalis* has a negative influence of the healing of surfaces (see newsletter 25 about cervical lesions).

Classically *Gardnerella vaginalis* has been considered the primary agent for bacterial vaginosis. Recently a number of other bacteria have been appointed as “the” agent, but increasing evidence about specific characteristics for *Gardnerella* has underlined its status as an important factor.

Gilbert et al. (2017) observed, that mice with urinary tract infection provoked by *G. vaginalis* had a relatively high (6%) occurrence of kidney infection, a dangerous condition that can lead to systemic infection and death.



Another argument has been added to the long list of very good reasons to keep the vagina healthy without *Gardnerella vaginalis*. The shop is open on www.ladybalance.dk. We have never postulated that LadyBalance lactose vaginal tablets could remedy urinary tract infection. But the question will be posed in the updated questionnaire to be conducted this year. If you have experiences in this aspect we would much appreciate to be informed on info@ladybalance.dk.

Reference: Gilbert NM, O'Brien VP, Lewis AL (2017) Transient microbiota exposures activate dormant *Escherichia coli* infection in the bladder and drive severe outcomes of recurrent disease. *PLoS Pathog* 13(3): e1006238. doi:10.1371/journal.ppat.1006238