

Combined Effect of Herbal Tea on Urinary Tract Infections Caused by *E.coli*

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Background & Objectives: Development of technology and synthesis of chemical drugs has made substantial contribution to human society but the side effects of chemical drugs and pharmaceutical resistance against the antibiotics caused that traditional herbal treatment tends to have more applications; therefore, we can use the antimicrobial properties of plants as a good replacement without harm. The infection of urinary system is known as a common and major problem of the present societies. *E.coli* is the most important factor for the urinary system infection. In this paper, we try to introduce usage of herbal decoction as a good replacement for treatment of urinary system infections.

Methods: This clinical study was performed on 35 female patients who suffered by urinary system infection with pyuria and *E.coli* positive cultured that referred voluntarily to the microbiology laboratory of Azad University, Babol branch. These individuals were prescribed herbal decoction (3 gr (200 cc) including Vaccinium species Plant, Mentha piperita, Thymus Vulgaris, Mentha longifolia mixed by 6 gr honey twice a day for one week.

Results: The infections were eliminated completely in 27 patients (77.14%) and the results of culture were negative. In 6 of them (17.4%) there was not any change and the number of colonies in the EMB medium were not seen any changes, IMVIC test were negative and in 2 of them (5.71%) there was increased infection and colonies in cultured medium.

Conclusion: Vaccinium makes unsuitable conditions for Urinary infections by reduction of urine pH and the *Vaccinium anthocyanin* has antioxidant property. Menthol in Mentha piperita, Mentha longifolia decoction mixed by honey has antibacterial and anti-inflammatory characteristic. According to the results, the positive effects of herbal decoction in most cases were concluded. This study can be the introduction of more evaluation of structural materials of decoction and in the cases of positive response, it can be as a suitable replacement for chemical drugs.

Keywords: Infection; *E. coli*; Mahmoud Abad