

ANTIBIOTICS COMBINED WITH NATURAL EXTRACT IS EFFECTIVE AGAINST UROPATHOGENIC *E. COLI* BIOFILM RELATED INFECTION

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Urinary tract infections (UTIs) are a serious health problem affecting people worldwide. Most of the bacteria that cause UTIs are uropathogenic *E. coli* (UPEC). UPEC causes the disease by creating a biofilm in the urinary tract. Biofilm formation conserves UPEC from environmental conditions, the host immune system, and antimicrobial therapy. Therefore, it is important to suppress the formation of biofilm because UPEC is often resistant to antimicrobial agent. We examined anti-biofilm effect in combination with antibiotics and soyaapogenol B. The anti-biofilm potential of soyaapogenol B on uropathogenic *E. coli* as well as its efficacy in disturbing the mature biofilms was examined under crystal violet, resazurin assay and confocal laser scanning microscope. The present study showed that the

combination of natural extract and antibiotics have a synergistic effect more than an existing antibiotics. These findings suggest that it is an effective therapeutic strategy to cure urinary tract infection caused by UPEC.

Biography

Hye-In Jang has completed her Bachelor's Degree in Biomedical Laboratory Science at the age of 24 years from Soonchunhyang University, Republic of Korea. She is now pursuing her Master's Degree in Medical Science and well as conducting a research at the Soonchunhyang University Laboratory of Microbial Forensics.

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