

INFECTION AND BIOFILM: TREATMENT LATEST ADVANCES**Gerrolt N. Jukema,***Trauma surgeon, The Netherlands*

Infection and biofilm formation are severe issues on which doctors, nurses and patients are faced with in daily practice. Once on site an infection has been recognised, in most cases valuable time for early recognition and early treatment was already lost. The longer the delay between recognition of early clinical signs of infection and evident symptoms of an established infection, the more difficult it will be to treat and possible cure the infection, especially in trauma surgery with patients wearing metal or bioimplants. Once the infection shows clinical symptoms, biofilm formation of relevant bacterial specimens (*S. aureus*, *S. epidermidis* and *P. aeruginosa*) has already started. Biofilms are hard to treat since most of the time they can't be attacked by antibiotic therapy, due to their hard to penetrate polysaccharide membrane complex. Only in their planktonic phase, free moving bacteria can be attacked by antibiotic substances, but this phase is very limited in time. Therefore different therapy modalities are needed based on new scientific based methods to influence and breakdown biofilm formation in daily patient care. Based on basic and experimental research the influence of topical negative pressure therapy in combination with instillation of polyhexanid solution 0.04% and the influence of maggot excretions on biofilm formation and biofilm degradation will be presented in relation to basic knowledge about biofilm formation in trauma patients.

References:

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