

Cytotoxic effect of gentamycin-coated hydroxyapatite on *Staphylococcus aureus* biofilm.

ABSTRACT

A biofilm is a multilayered complex microorganism, which attached on a surface and resistant to antibiotics. In this study, we examined the cytotoxicity of the HA biomaterial coated with gentamycin on *S. aureus* biofilm. The microtiter plate biofilm assay and catheter-associated biofilm had been described in this study. The surface morphology of *S. aureus* biofilm was examined under scanning electron microscope (SEM). The IC₅₀ of gentamycincoated HA treated on *S. aureus* biofilm was 0.1mg/ml (100µg/ml).

Keyword: Biofilm; Catheters and scanning electron microscopy; Gentamycin-coated HA; *Staphylococcus aureus*.