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.