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> ADHESION OF BONE MARROW MESENCHYMAL STEM CELLS ON POROUS TITANIUM SURFACES WITH STRONTIUM-DOPED HYDROXYAPATITE COATING

> > Keyword: Cell adhesion, Bone marrow mesenchymal stem cell, Strontium-substituted hydroxyapatite, Titanium

## Research Summary

 This study was to determine the adhesion behavior of bone marrow mesenchymal stem cells on a titanium surface with a nanostructured strontium-substituted hydroxyapatite coating.



**BMSC** 



J70 20.0kV 9.2mm x5.00k SE(M)

10.0um

Sr-HA coating

## Innovation points

- The coatings were produced using a electrochemical method.
- characterization of the coatings were analyzed.(Figure 1,2 and Table 2)
- The cell adhesion of each group were observed (Figure 3,4,5)
- The gene expression of FAK, vinculin, integrin β1, and integrin β3 were measured.(Figure 6)