Tissue-engineered Oral Mucosa

Type: Journal Article

Abstract:

Advances in tissue engineering have permitted the three-dimensional (3D) reconstruction of human oral mucosa for various in vivo and in vitro applications. Tissue-engineered oral mucosa have been further optimized in recent years for clinical applications as a suitable graft material for intra-oral and extra-oral repair and treatment of soft-tissue defects. Novel 3D in vitro models of oral diseases such as cancer, Candida, and bacterial invasion have been developed as alternatives to animal models for investigation of disease phenomena, their progression, and treatment, including evaluation of drug delivery systems. The introduction of 3D oral mucosal reconstructs has had a significant impact on the approaches to biocompatibility evaluation of dental materials and oral healthcare products as well as the study of implant-soft tissue interfaces. This review article discusses the recent advances in tissue engineering and applications of tissue-engineered human oral mucosa.

Author	Moharamzadeh, K ; Colley, H. ; Murdoch, C. ; Hearnden, V. ; Chai, W. L. ; Brook, I. M. ; Thornhill, M. H. ; MacNeil, S.
Source	Journal of Dental Research
ISSN	0022-0345
DOI	10.1177/0022034511435702
Volume (Issue)	91(4)
Page	-
Year	2012

Keyword:

Candida, tissue engineering, oral diseases, soft-tissue defect , implantology, Drug effect

Please Cite As:

MOHARAMZADEH, K., COLLEY, H., MURDOCH, C., HEARNDEN, V., CHAI, W. L., BROOK, I. M., THORNHILL, M. H. & MACNEIL, S. 2012. **Tissue-engineered Oral Mucosa.** *Journal of Dental Research,* 91(4).

URL:

- http://www.ncbi.nlm.nih.gov/pubmed/22266525
- http://jdr.sagepub.com/content/early/2012/01/19/0022034511435702.abstract