

GENE THERAPY ON DENTISTRY

ABSTRACT

Some diseases, such as genetic diseases, as well as viral infectious diseases, have been treated unsatisfied by the conventional therapy so far. Gene therapy may become an integral tool in dental practise early in 21st century. Gene therapy is a novel approach to treating diseases based on modifying the expression of genes toward a therapeutic goal. These biological therapies are expected to be applied to oral diseases and disorders during the midpractise lifetime of today's dental students. If the applications of oral gene transfer are expanded to systemic diseases, oral health care providers in the future could routinely be gene therapist with therapeutic targets well outside the oral cavity. There are some areas that developed in dentistry i.e. bone repair, autoimmune diseases, salivary glands, and many more. To deliver therapeutic gene into target cell, a vector is needed. This therapy usually using a viral vector and ex vivo or in vivo methods. It is important for dentists to recognize and pay attention to the advances taking place in the field of biotechnology, especially in genetic engineering. This field will change the future of dental practise within the next two decades by providing an advanced standard of care for the dental patients.

Keyword: *Gene therapy, vector, gene transfer, gene therapeutics, dentistry.*