عنوان مقاله:

Assessment of Laser Effects on Skin Rejuvenation

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نویسندگان:

Hazhir Heidari Beigvand

Mohammadreza Razzaghi

Mohammad Rostami-Nejad

Majid Rezaei-Tavirani

Saeed Safari

Mostafa Rezaei-tavirani

Vahid Mansouri

Mohammad Hossein Heidari

خلاصه مقاله:

Abstract Laser skin resurfacing has changed the approach of facial skin rejuvenation over the past decade. This article evaluates the laser effects on skin rejuvenation by the assessment of laser characteristics and histological and molecular changes, accompanied by the expression of proteins during and after laser-assisted rejuvenation of skin. It is important to note that different layers of skin with different cells are normally exposed to the sun's UV radiation which is the most likely factor in aging and damaging healthy skin. To identify the expression of proteins, using validated databases and reviewing existing data could reveal altered proteins which could be analyzed and mapped to investigate their expression and their different effects on cell biological responses. In this regard, proteomics data can be used for better investigation of the changes in the proteomic profile of the treated skin. Different assessments have revealed the survival and activation of fibroblasts and new keratinocytes with an increase of collagen and elastin fibers in the dermis and the reduction of matrix metalloproteinases (MMPs) and heat shock proteins (HSPs) as a result of different low-power laser therapies of skin. There are a wide range of biological effects associated with laser application in skin rejuvenation; therefore, more safety considerations should be regarded in the .application of lasers in skin rejuvenation. Keywords : Rejuvenation Scars Laser Skin aging Laser therapy

کلمات کلیدی: