

ReCell® Spray-On Skin™

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Abstract—The skin is the largest organ in the body. It is the body's first natural shield from both disease and infection. In this way, post accident damage to the skin can even be fatal if skin can not properly, and quickly be regenerated. ReCell skin treatment is the an exciting treatment which can significantly decrease the regeneration and healing time of the skin/

I. INTRODUCTION

THE ReCell® Spray-On Skin™ is a rapid, autologous cell harvesting, processing and delivery technology which treats a number of cell defects. The treatment uses the patient's own skin cells to speed up the healing, minimize scar formation, eliminate tissue rejection, and reintroduces pigmentation.

II. METHODS

ReCell treatment comes with a fairly unique method of application. The treatment comes in the form of a spray on style liquid. The kit itself includes the spraying syringe as well as the components to separate the patients cells and prepares the spray fluid. The treatment is only available through a qualified surgeon.



The process of the treatment first involves taking a roughly one to two squared centimeter sample (no more than .33 millimeters deep) of the patients skin. The sample skin must be taken from an area that is in close proximity to the damaged region to insure the desired skin cells take on the properties of skin cells similar to those which were lost. The skin is inserted directly into the kit where it is broken down. The fluid within the kit is designed to separate out the skin cells which are distributed into the spray fluid. The premise of the cell regeneration is the utilization of the enzyme Trypsin. However, before the spray is applied the area that will

be treated is prepare to optimize skin growth. This is done by means of techniques such as demabrasion or ablative skin surfacing lasers.

III. RESULTS

The treatment has been proven to be extremely successful thus far. The first layer of new skin is generally fully formed in around seven days. This is a remarkable result considering regeneration of this layer after severe damage to the skin (such as a serious burn seen below) typically takes around thirty days. In addition to the shortened regeneration time the treatment has been proven to significantly reduce scarring. In some cases, no signs of scarring can be seen after the full four to eight week recovery period.



IV. DISCUSSION

Not only is this treatment is this treatment extremely successful in treating a number of different skin problems. It is safe and quick. The treatment itself takes around an hour and a half and the results are permanent. The treatment is already available in a vast number of different countries, however it is still awaiting approval in the U.S.. It is projected that the product will be approved by the FDA and will be commercially available by 2016. it is only in the trial stages, laser treatment is a method that holds both extreme economical and medical potential. It is estimated that the treatment will cost some where from \$2500 to 3000.

References

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