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Utilization of Nd: YAG Laser (1064 nm)
in the Treatment of WART

*A dissertation Submitted for Partial Fulfillment of the Requirements
for the Degree of Post Graduate Diploma of Laser
Applications in Medicine-Dermatology*

By

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Abstract

Warts are actually a benign growth in the surface layers of the skin they *are caused by a virus. There are many different types of viruses* that cause, from the top of head to the bottom (plantar surface) of foot. The virus can invade the tissue through a small cut or break in the outer layer of skin, and if body is unable to kill the virus by its immune system, a wart may develop.

Warts can be solitary, or clustered together (mosaic warts). These texture is spongy and many times have tiny black spots imbedded in the tissue. There spots are blood capillaries, and wherever a capillary is , a nerve is close by. This is why its painful and bleed easily-they have many blood vessels and nerve endings imbedded in them. Treatment of warts varies depending on their symptoms, size, and number.

The objective of this study is to find an applicable method for treating warts by using Neodymium – Ytrium – Aluminium – Garnet (Nd: YAG) laser 1064nm .

Eight patients were included in the study (6) males and (2) females.

Using Nd: YAG laser standard mode, non contact application , optical fiber was used with fluence 140 J/cm², pulse duration 5 msec, spot size 5 mm.

The lesions distributed on the scalp, face, hand .

Lesion were treated in 2 to 4 sessions, with high cure rate without scaring.

المخلص

التأليل التي تصيب الجلد والتي سببها الالتهاب الفيروسي تعتبر صعبة العلاج بالطرق القديمة المتعارف عليها. تظهر التأليل الفيروسية عادة في جميع أجزاء الجسم .

الهدف من هذه الدراسة هو إيجاد تطبيق عملي فعال وسهل لعلاج التأليل الجلدية.

أجريت هذه الدراسة بجهاز الليزر النيوديوم ياك مع مراعاة تحديد قياسات الجرعة وتطبيقاتها وتطبيق قياسات أمان وسلامة الليزر. الدراسة أجريت في الفترة من بداية شهر يناير حتى نهاية مارس ٢٠١١ م .

خضع للدراسة عدد (٨ من المرضى ٦ ذكور واثنتان من الإناث) . استخدم الليزر للمرضي بطاقة (١٢٠ - ١٦٠) جول لمدة ٥ أجزاء من الثانية في مساحة ٥ ملم مربع .

أظهر بعض المرضى استجابة بنسبة عالية بعد جلستين والبعض الآخر بعد (٣) و (٤) جلسات وذلك بدون أي مضاعفات كالندبات أو تغير في لون البشرة .

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