Sudan University of Science &Technology (SUST)
College of Graduate Studies

Institute of Laser

The use of long pulsed Nd: YAG Laser (1064 nm) in treatment of viral warts

A dissertation Submitted for the Requirements of the Postgraduate Diploma Degree in Laser in Medicine / Dermatology

By
Khalid Abdalla Abdelhameed Shamat
MBBS (U OF K)
Dermatologist, Venerologist and Andrologist.
Membership (S.M.S.B)

Supervised by :

Dr.Wafaa S. A.Rhman
Institute of Laser (SUST)

Dr.Yousif A. Safieldin
Dermatology Department (KSH)

July 2007

Abstract

The objective of this study was to investigate the efficacy of Nd: YAG laser (1064nm) long pulse in the treatment of viral warts. It was designed in a randomized study. The setting held at the Institute of laser, College of postgraduate students, Sudan University for science and technology, Khartoum, Sudan. This was in the period between the 10th of April to the 10th of July 2007.The study covered 52 patients aged 10-52 years. The interventions we administered during a 3 month period were 62 treatments, for a mean ±SD of 1 ± 1.1 treatments per patient.

The main outcome measure of patients was that, they received therapy until the lesion was clear or until the lesion did not respond to treatment. Evaluation was performed by comparing pre-treatment and post-treatment photographs. The results of these 52 patients who completed the period of treatment and follow up were as follows. The total cure rate of the warts treated with standard mode non contact long pulse Nd: YAG laser was 88.5% after one session, 92.3% after two sessions and 100% after three sessions. High cure rate was obtained in most body sites. Acceptable to poor cure rates were seen in hands and feet.

The conclusion derived from this study is that the Nd: YAG laser therapy of (*HPV*) wart should be considered as a good and dependable alternative to other traditional techniques. It results in eliminating the verrucae and minimizing the complications of scarring and disorders of pigmentation and postoperative pain.

List of Contents

Chapter One

Introduction & Basic Concepts

Section A

Section B

Chapter Three

Results & Discussion