

**Sudan university of Science & Technology**

**College of graduate studies**

**Institute of Laser**

**THE TREATMENT OF ANOGENITAL WARTS**

**BY Nd:YAG LASER (1064nm)**

A Dissertation submitted for partial fulfillment  
of requirements of postgraduate Diploma of Laser applications  
in Medicine /Dermatology

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## Abstract

This study aimed to determine the safety and efficacy of the chopped CW Nd: YAG 1064 nm laser for the treatment of anogenital warts in both adult males and females. It was a prospective observational study set in the Institute of Laser-Sudan University from April through July 2007. A total of 7 adult males and 3 adult female patients with uncomplicated anogenital warts were included. Photocoagulation of the lesions with the Nd: YAG 1064 nm laser was carried out. A chopped CW Nd: YAG 1064 nm laser of 0.5 second duty cycle was used with the following settings: non contact fiber optic (400 micron); power 20-50 watts. As a result, complete resolution of treated warts was achieved in 88% of lesions after the first session, 10% after the second session and 2% after the third session. Side effects were limited, transient and infrequent. It can be concluded that the Nd: YAG 1064 nm laser has been found to be safe, effective and satisfactory for the treatment of anogenital warts in both males and females. It could be used to destroy warts without damaging the surrounding skin.

## ملخص البحث

هدف هذا البحث تحديد مقدرة و أمان استعمال الاندياك ليزر **1064** في علاج الاثليل الجلدية في المناطق التناسلية للجنسين. تمت هذه الدراسة في معهد الليزر- جامعة السودان خلال الفترة من ابريل حتى يوليو **2007**. اشتملت الدراسة على عدد **7** نكور و **3** اناث تم علاجهم بواسطة الاندياك ليزر **1064**. كان زمن نبضة الليزر **0.5** ثانيه مع استعمال الالباف البصرية (**400** ميكرون)، مقدرة الجهاز **20**-**50** وات. كانت النتائج كالتالي: **88%** من الاثليل تم شفائها كاملا في الجلسة الاولى للعلاج، **10%** تم شفائها في الجلسة الثانية للعلاج، **2%** تم شفائها في الجلسة الثالثة من العلاج. في الاخير وجد الاندياك ليزر فعال و آمن في علاج الاثليل التناسلية الجلدية في الجنسين.

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