## Sudan University of Science and Technology Collage of graduate studies

Utilization of CO<sub>2</sub> laser in the treatment of skin tags

A dissertation submitted in partial fulfillment for the requirements of the degree of diploma in laser application in medicine/dermatology.

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## **ABSTRACT**

Achrochordon are common benign skin overgrowths that look like small pieces of soft hanging skin, and are harmless. They occur mainly in adults. The individual lesions are black or dark brown,. The skin tags show no tendency to regress spontaneously and the condition may be cosmetically undesirable to some patients.

This is a prospective clinical descriptive, intervention study, aimed to detect the effect of CO<sub>2</sub> laser in the treatment of skin tags in some Sudanese patients. The study was performed at Sudan University of Science and Technology, Institute of laser, in the laser clinic, in the period from March - August 2014. Monday and Thursdays were chosen for data collection.

Ten patients (seven females and three males), clinically diagnosed as having skin tags, have been included, and were considered as the study population.

All patients were treated with IB-60IB CO<sub>2</sub> laser system with wavelength of 10.600nm. All patients received the same laser parameters of CO<sub>2</sub> laser, using the non contact method, power of 3.5 Watt power, 0.1 second duty time, 0.1 second idle time. The frequency of treatment was single session per week for a total of one to two sessions according to the patient need.

Photographs were taken before treatment, immediately after treatment, and three weeks after the last session to observe the pattern of response to laser therapy. Most of the patients are females seek removal of skin tags due to cosmetic concern.

The results showed that all most all patients (100%) were completely cured without residual complication.

The study concluded that Conclusion CO<sub>2</sub> laser with 10.600 nm is effective and safe in treatment of skin tags.

## مستخلص الدراسة

اجريت هذه الدراسه بجامعه السودان للعلوم والتكنولوجيا معهد الليزر في الفترة مابين مارس – اغسطس 2014م على عشرة مرضى.

الهدف: الهدف من هذه الدراسة هو تحديد أثر ثاني اكسيد الكربون 10.600 في معالجة المرضي المصابين بزوائد جلدية.

المنهجية: تم تشخيص عشره مرضي لديهم زوائد جلديه وتمت معالجتها بليزر ثاني اوكسيد الكربون10.600 وقوه 3.5 واط ولمده 0.1 ثانيه ونظام تسليط اشعه الالياف الضوئيه بدون ملامسه للجسم.

النتائج: اوضحت هذه الدراسه ان كل المريضات الاناث يسعين لازالة الزوائد لاسباب تجميلية وكانت النتيجة ايجابية في كل المرضي.