

# **Dedication**

*I would like to convey my deep gratitude and appreciation to my beloved parent, for their help and encouragement especially to the spirit of my dear mother who passed away before receiving the fruit of this effort. They always encouraging me exert more efforts and to continue my study and develop my career, to both of them I devote this handable work.*

*Also I would like to send my great thanks to my husband, Dr.Emadaldin Ahmed, for his precious support and good guidance.*

*And for my daughter Fathiya, and my sons Mohammed, and Momen .*

*Then I'm not going to forget my big family, brothers Eng.Mohammed, Dr.Saadaldin and sisters Eng .Lubna and Translator Wisal .*

## **Acknowledgment**

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### **Abstract**

This is a descriptive study conducted in El Nou Hospital (Screening Center for Cervical Cancer )during the period from December 2009 to August aghast 2010. The study aimed to find out if there is any relation between HPV16 and18 in cervical cancer and oral epithelial cells infection. HPV was investigated among 50 women of whom, 40 were patients with cervical lesions and 10 were clinically healthy (as control group). For each study subjects two specimens were taken (cervical cells and oral cells). The DNA was extracted from tissue samples then polymerase Chain Reaction (PCR) was applied to investigate the HPV. In this study, among 40 patients with cervical lesions, HPV was identified in sixteen (40%) of study subjects. Of the eight (20%) positive with HPV subtype 16, six (15%) were identified with HPV subtype 18, and two (5%) were detected with both HPV subtypes 16 and 18. All of the clinically healthy cases were found negative.

However, in specimen from oral cavity only one (2.5%) case was found positive for HPV subtype 16.

HPV plays a critical role in the development of cervical cancer, in the Sudan. No clear relation between cervical and oral HPV infection. The study recommended screening more patients who suffer from cervical cancer using more advanced molecular techniques to confirm the role of the HPV in developing of cervical SCC in Sudan.

## ملخص الاطروحة

هذه دراسة وصفية اجريت بمستشفى النو (مركز الكشف المبكر لسرطان عنق الرحم) في الفترة من ديسمبر 2009- أغسطس 2010 هدفت هذه الدراسة اذا كانت هنالك علاقة بين فيروس الورم الحليمي البشري من النوع 16-18 في سرطان عنق الرحم والخلايا الظاهرية الفموية . فيروس الورم الحليمي البشري تم التحقق منه في 50 امرأة ( 40 مريضه مصابه بآفه الرحم و 10 أصحاء) (مجموعه ضبط)) لهذه .(الدراسة اخذت عينتين (مسحه من عنق الرحم ومن تجويف الفم الحامض النووي الريبوزي تم استخلاصه من عينات النسيج ثم طبق تفاعل البلمرة التسلسلي للتحقق من فيروس الورم الحليمي البشري . خلال 40 مريضه بآفه الرحم . فيروس الورم الحليمي البشري تم التعرف عليه لدى 16 (40%) فى هذه الدراسة. 8 (20%) تم تشخيصهم بفيروس الورم الحليمي البشري من النوع 16, 6 (%) 15) من فيروس الورم الحليمي البشري النوع 18 , و 2 (5%) من فيروس الورم الحليمي البشري النوعين 16 , 18 . كل العينات التي اخذت من الاصحاء وجدت سالبه . اما الفم من بين الذين شملتهم الدراسة 1 ( 2% ) تم التحقق من فيروس الورم الحليمي من النوع 16. فيروس الورم الحليمي البشري يلعب دور فعال في تطور سرطان الرحم في السودان , ليست هناك علاقة واضحة بين اصابات فيروس الورم الحليمي البشري في الرحم و الفم .هذه الدراسة توصي بزياده المسح الذريئ للمرضى الذين يعانون من سرطان الرحم وباستخدام انواع متقدمه من الفحص الجزيئ للتأكد من فيروس الورم الحليمي البشري .في تطور سرطان عنق الرحم في السودان

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