

الآية

قال تعالى:

{اعلموا أنّما الحياه الدنيا لعب ولهو وزينه وتفاخر بينكم وتكاثر في الأموال والأولاد كمثل غيث أعجب الكفار نباته ثم يهيج فتراه مصفرا ثم يكون حطاما وفي الآخرة عذاب شديد ومعفرة من الله ورضوان وما الحياه الدنيا إلا متاع الغرور}

صدق الله العظيم

سورة الحديد الآية (20)

Dedication

This dissertation dedicated to my parents who taught me to get up after a fail and start again and for their endless love and support.

To my brothers and sister.

To my colleagues and my friends who have always helped me and believed that I could do it.

And also to my supervisor and teaching staff for their devotion to education.

Lastly,

To those who are interested in histopathology and cytology in the world.

Acknowledgment

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Abstract

This is a descriptive, retrospective case study which was conducted at research laboratory in Sudan University of Science and Technology department of histopathology during the period from February to August 2017. The study aimed to detect the HPV-51 and cervical cancer patients using PCR technique, There by 40 formalin fixed embed tissue blocks of different cervical cancer type were collected.

The tissue blocks were cut by Rotary microtome, prepared for DNA Extraction and then the viral DNA was detecting using PCR and a garose gel electrophoresis, the Data was analyzed manually, frequencies and percentage were calculated.

The ages of patient were range between 30 to 70 years with mean age 50, Most of patient were more than 40 years representing 35/40 (88%) and the remaining less than 40 is 5/40 (12%).

The study showed that keratin cervical cancer represents 87% and Non-keratin is 13%.

The results of the DNA polymerase chain reaction of the human Papilloma virus were negative in all cervical tissue samples.

The study concluded that HPV-51 does not play a role in causing cervical cancer.

مستخلص الدراسة

أجريت هذه الدراسة الوصفية الإسترجاعية بمختبر الأبحاث قسم الأحياء الجزيئية بكلية المختبرات الطبية –جامعة السودان للعلوم والتكنولوجيا شعبة الانسجة المريضة خلال الفترة من مايو الى اغسطس ٢٠١٧م.

هدفت الدراسة إلى اكتشاف فيروس الورم الحليمي البشري -51 لدي مرضي سرطان عنق الرحم باستخدام تقنية تفاعل البلمرة المتسلسل وطريقة الفرز الكهربائي ، جمعت أربعون عينة ٤٠ نسيج محفوظة بالفورمالين ومثبتة في قوالب شمع البرافين من مختلف انواع سرطان عنق الرحم قطعت قوالب الأنسجة لشرائح رقيقة بواسطة المشراح الدوار ، جهزت لاستخراج الحمض النووي ومن ثم تم الكشف عن الحمض النووي الفيروسي باستخدام جهاز تدوير تفاعل سلسلة البوليميريز وطريقة الفرز الكهربائي على هلام الأغاروز ، وكان تحليل البيانات يدويا حيث حسبت الترددات والنسبة المئوية.

تراوحت أعمار المرضى بين ٣٠ و ٧٠ سنة بمتوسط عمر ٥٠ عاما، وكان معظم المرضى من الذين اعمارهن أكثر من ٤٠ سنة ويمثلون ٤٠/٣٥ (٨٨٪) والباقي أقل من ٤٠ سنة ويمثلون ٤٠/٥ بنسبة (١٢٪).

أوضحت الدراسة ان سرطان عنق الرحم الكيراتيني يمثل ٨٧٪ وغير الكيراتيني يمثل ١٣٪ كانت نتائج تفاعل سلسلة البوليميريز للحمض النووي لفيروس الورم الحليمي البشري نوع -51 سلبية في جميع عينات نسيج عنق الرحم. خلصت الدراسة إلى أن لفيروس الورم الحليمي البشري نوع -51 ليس له دور في تسبب سرطان عنق الرحم .

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List of abbreviations

Abbreviation	Full term
HR	High risk
LR	Low risk
DNA	Deoxyribonucleic Acid
HPSGs	Heparin Sulfate Proteoglycans
HPV	Human papilloma Virus
HR-HPV	High Risk Human papilloma Virus
IARC	International Agency for Research on Cancer
ICTV	International Committee on Taxonomy of Viruses
NALB	Nucleic Acid lysis Buffer
PCR	Polymerase Chain Reaction
PV	papilloma Virus
TZ	Transformation zone
CIN	Cervical intraepithelial neoplasia
VIN	Valvular intraepithelial neoplasia
VAIN	Vaginal intraepithelial neoplasia
RICK	Radiation and isotopes center of Khartoum
NCI-UG	National cancer institute of the university of Gezira
A	Agent
E	Early
L	Late
PAP	Papanicolaou
ICC	Interview cervical cancer
P16NK4A	Protein 53
PRb	Retinoblastoma protein

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