

الآية

بسم الله الرحمن الرحيم

﴿ وَفِي أَنْفُسِكُمْ أَفَلَا تُبْصِرُونَ ﴾

صدق الله العظيم

سورة الذاريات، الآية: 21

Dedication

Happily, I would like to dedicate this simple attempt to:

The one who taught me to be an active citizen in the community, the essence of life, meaning of humanity ...

My Mother

The one who gave me the sense of everlasting warmth, love and beauty...

My Husband

To all in my love

To all of you I dedicate my study

Rabab

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Rabab Elteyeb Hadaby

Abstract

This is a descriptive retrospective study carried out in Ibn Sena Hospital and Sudan University of Science and Technology, college of Medical Laboratory Science during the period between April 2014 to October 2014. The study aimed at detection of CDX2 and EBV immunohistochemically in esophageal tumors among Sudanese patients.

30 paraffin blocks previously diagnosed as esophageal tumors, 20 were diagnosed as esophageal cancer and 10 were diagnosed as benign esophageal tumors, were used in this study ages ranging from 8– 98 years with mean age of 59 years old.

Two sections were taken from paraffin wax embedded blocks and placed in coated slide to detect CDX2 and EBV immunohistochemically. SPSS version 11.5 computer program was used to analyze the data, frequencies; means and Chi square test were calculated.

Out of 30 patients with esophageal tumor, 20(66.7%) patients were males and 10(33.3%) were females with ratio 1:2.

Out of 30 samples 4(13.3%) cases positive for CDX2 in malignant sample and 26(86.7%) cases were negative with no relation between CDX2 expression and type of tumors (P.value: 0.129).

Out of 30 samples 5(16.7%) cases were positive for EBV, while 25(83.3%) cases were negative with no relation between EBV infection and type of tumors (P.value: 0.083).

On the basis of These finding the study concluded that there is no association between CDX2 expression and EBV infection with type of esophageal tumors.

ملخص الدراسة

أجريت هذه الدراسة الوصفية الإسترجاعية بمستشفى ابن سينا بالخرطوم وجامعة السودان للعلوم والتكنولوجيا كلية علوم المختبرات الطبية خلال الفترة من أبريل وحتى أكتوبر 2014م، هدفت الدراسة للكشف عن ارتباط الواسمة الورمية CDX2 وفيروس إبشتيان بار مع أورام المرئ لدى المرضى السودانيين باستخدام اختبار تقنية كيمياء الأنسجة المناعية.

جمعت العينات 30 مريضاً (20 مشخصين مسبقاً بسرطان المرئ و 10 حالات ورم حميد) تتراوح أعمارهم من 8- 98 سنة ومتوسط أعمارهم 59 سنة.

تم قطع نسيجين من كل عينة من قالب شمع البرافين في شريحة وتجهيزها للصبغ عن طريق كيمياء الأجهزة المناعية للكشف عن CDX2 و EBV. تم استخدام برنامج الحزم الإحصائية للعلوم الاجتماعية (SPSS) لتحليل البيانات، وتم حساب الترددات، المتوسط واختبار مربع كاي.

من 30 مريضاً قيد الدراسة، 20 (66.7%) كانوا ذكوراً، و 10 (33.3%) كانوا إناثاً بمعدل 1:2

من أصل 30 عينة 4 (13.3%) عينات كانت نتيجتها إيجابية مع CDX2 و 26 (86.7%) عينة كانت سلبية، لعينات المرضى المشخصين بأورام المرئ ولم تكن هنالك علاقة ارتباط بين إفراز CDX2 ونوعية الورم.

5 (16.6%) عينات نتيجتها كانت ايجابية لفيروس إبشتيان بار باستخدام كيمياء الأنسجة المناعية، و 25 (83.3%) كانت سلبية، لعينات المرضى المشخصين بأورام المرئ ولم تكن هناك علاقة ارتباط بين الإصابة بفيروس إبشتيان بار ونوعية الورم.

خلصت الدراسة إلي أنه لا توجد علاقة بين إفراز CDX2 والإصابة بفيروس إبشتيان بار مع أورام المرئ.

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List of Abbreviations:

CDX2	Caudal – Related Homologene 2
EBV	Epstein Barr virus
HPV	Human Papilloma virus
DNA	Deoxy ribonucleic acid
NPC	Nasopharyngeal carcinoma
SCC	Squamous cell carcinoma
CEA	Carcinoembryonic antigein
SQJ	Squamo columnar junction
GEJ	Gastro esophageal junction
GIST	Gastro intestinal stromal tumor
TNM	Tumor, Node, Metastasis
CD25	Cluster of differentiation-25
FOXP3	Forkhead box p3
P53	Phosphoprotein 53 or Tumor protein 53
CYFRA21-1	Cytokeratin 19 fragment marker
WAF1 or CDK1	Cyclin – dependent – kinase inhibiter1
CDK	Cyclin dependent kinase
GERD	Gastro esophageal reflux disease
EBV-1	Epstein Barr virus -1
EBV-2	Epstein Barr virus -2
EBNA-2	Epstein Barr nuclear antigen -2
EBNA-3A	Epstein Barr nuclear antigen – 3A
EBNA-3B	Epstein Barr nuclear antigen – 3B
EBNA-3C	Epstein Barr nuclear antigen – 3C
IGG	Immunoglobulin gamma
IGM	Immunoglobulin mu
IGA	Immunoglobulin alpha
CTLs	Cytotoxic T lymphocytes
EBNAS	Epstein Barr nuclear antigens
LP	Leader protein
EBNA-1	Epstein Barr nuclear antigen -1
EBNA-2	Epstein Barr nuclear antigen -2
EBNA-LP	Epstein Barr nuclear antigen – Leader protein
LMP	Latent membrane protein
LMP-1	Latent membrane protein -1
LMP-2	Latent membrane protein -2
LMP-2A	Latent membrane protein -2A
LMP-2B	Latent membrane protein -2B
EBER	Epstein Barr virus – encoded small RNAs
EBER1	Epstein Barr virus encoded small RNA-1

EBER2	Epstein Barr virus encoded small RNA-2
RNAS	Ribonucleic acids
AIDS	Acquired Immune disease
ISH	In situ hybridization
ESCC	Esophageal squamous cells carcinoma
Q-PCR	Quantitative polymerase chain reaction
PCR	Polymerase chain reaction
HRP	Horseradish peroxidase
DPX	Distrene, Plasticiser, Xylene

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