P53 EXPRESSION IN ORAL SQUAMOUS CELL CARCINOMA AND ITS RELATIONSHIP TO QAT AND TOBACCO USE IN YEMEN

A Thesis Submitted for the Partial Flfillment of Master Degree in Pathology

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Introduction:

Although tobacco smoking and alcohol drinking are the most important risk factor for oral squamous cell carcinoma in the western countries, Qat chewing and smokeless tobacco are principal factors in the East ***(Kerdpon et al., 2001)***.

The expression of P53 in oral cancer has been investigated by several studies with marked discrepancy ***(Matthews et al, 1993, Chow et al, 2003. Shoe et al, 2001, Nagler et al, 2002, Vora et al, 2003)***. It has been claimed that variation in the risk habits may be responsible for these contraversal results ***(Kerdpon et al., 2001)***.

Chewing of Qat and tobacco is commonly used in East Africa and parts of the Middle East, such as the Yemen ***(Al-Matarreb et al., 2002)***.

It has been reported that the incidence of oral squamous cell carcinoma is relatively high in Yemen and it is usually associated with Qat Chewing ***(Nasr and Khatri, 2000)***.

By reviewing the international literature, No histopathological or immunohistochemical studies of oral cancer in Yemen have been reported.

The aim of the present study is to investigate, the expression of P53 in oral carcinoma from Yemni patients by means of

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immunohistochimetry in order to assess its relationship to the various habits in Yemen.

Materials and Methods:

All cases of oral carcinomas diagnosed at Al-Thawara General Hospital in Sana'a, Yemen will be the subject of the current study. Oral non malignant lesions will be used as control group. All cases will be studied as follows:

a) Age, sex and history of risk habits, especially use of qat, tobacco and alcohol drinking

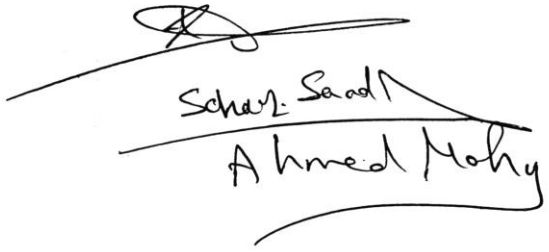
b) Biopsies from the malignant and non malignant cases will be investigated as follows:

   1- Histopathologic examination to assess:

      - Histologic diagnosis.
      - Histologic type of malignancy.
      - Histologic grade of squamous cell carcinoma.
      - Degree of dysplasia in nonmalignant cases.

   2- Immunohistochemical examination of paraffin tissue sections for P53 protein expression.

   3- The results will be statistically analyzed and discussed in the light of literature.



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وجود جين ب ٥٣ في سرطان الفم وعلاقته باستخدام القات والتبغ في اليمن

بالرغم أن تدخين التبغ وتناول الكحوليات عوامل تؤدي إلى زيادة الـورم الظهـاري الحرشفي الخبيث للفم في المناطق والدول الغربية. فإن مضغ القات والتبغ يعد من العوامـل الأساسية في المناطق والدول الشرقية. إن إظهار ب ٥٣ في سرطان الفم تم دراسته في عـدة أبحاث أظهرت وجود اختلاف واضح ويفسر ذلك باختلاف طبيعة العوامل المؤثرة والعـادات المختلفة التي تعد مسئولة عن هذا الاختلاف.

إن مضغ القات والتبغ يتم على نطاق واسع في المناطق الشرقية لقارة إفريقيا وبعض مناطق الشرق الأوسط ومنها اليمن.

إن نسبة حدوث سرطان الفم تعد مرتفعة فى اليمن ولها علاقة وثيقة بمضغ القات.

وبمراجعة المراجع العالمية لا توجد أى أبحاث هستوباثولوجيه ومناعية لأورام الفـم الخبيثة فى اليمن .

هدف البحث:-

يهدف هذا البحث إلى دراسة سرطان الفم في مرضى اليمن من الناحية الباثولوجيـة وإظهار ب ٥٣ وذلك باستخدام الصبغة المناعية وذلك لتقييم العلاقة بينه وبين العادات المختلفة باليمن.

الطرق والمواد المستخدمة في البحث:-

١- سيتم جمع الحالات من مستشفى الثورة العام بصنعاء بدولة اليمن الشقيق وسـيتم استخدام إصابات الفم الحميدة كعامل مقارنة.

٢- سيتم دراسة جميع الحالات كالآتي:-

أ-العمر والنوع وتاريخ وجود عامل مؤثر خاصة القات،التبغ،وتناول الكحول.

ب-عينات من الأورام الخبيثة والإصابات الحميدة للفم، وسيتم فحص تلك الحالات كالآتي:-

- فحص هستوباثولوجي ويشمل التشخيص ونوع الورم ودرجته مع وجـود تغيرات لا نمطية في الإصابات الحميدة.

وجود جين ب ٥٣ فى سرطان الفم وعلاقته
باستخدام القات والتبغ فى اليمن

رسالة ماجستير مقدمه من

أميرة محمد حمود الصرحى

بكالوريوس طب عام وجراحة

كلية الطب – صنعاء

وذلك توطئه للحصول على درجة الماجستير

تحت إشراف

أ.د / ثناء السيد أحمد هلال

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جامعة عين شمس

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Amira Mohammed Al-sarhi

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List of Abbreviations

AJCC	:	American joint committee on cancer.
BSC	:	Basaloid squamous cell carcinoma.
CD	:	Cluster of differentiation
CI	:	Confidence interval.
DAB	:	Diaminobenzedine
HPV	:	Human papilloma virus.
KD	:	Kilodalton.
p53	:	Protein of molecular weight 53.
PBS	:	Phosphate buffered saline.
ROS	:	Reactive oxygen species.
RR	:	Relative risk.
SCC	:	Squamous cell carcinoma.
SV	:	Simian virus.
TNM	:	Tumor, node, metastasis.
UICC	:	International union against cancer.
WHO	:	World health Organization

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