### **Dedication**

My dedication to

My parents the source of light my life

My brothers the source of my power

My wife & daughters of my life

### **Acknowledgment**

Grateful and good thank fullness to Allah, Acknowledgement to who shared completely to carry out this work, to my supervisor Dr. Mohammed Siddig deputy dean of Medical Laboratory Science (SUST). Great thanks to Dr. Hassan siddig Head department of histopathology, Dr. Moneira Abdallah, Mr. Abdallah Hasab Elenabi, Mr.Abu AL- gassim and Mr. Sharaf Eldin for their constant help and advice. All thanks to the staff of histopathology and cytology department of the College of Medical Laboratory science.

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#### Abstract

This is a descriptive study(case -control) conducted in Sana'a city in Yemen, during the period from March to August 2011. This study aimed to study the cytomorphological pattern of buccal mucosa among al qat chewers using cytological methods. The samples were collected from 200 individuals divided as follows: 100 individuals were al qat chewers as a case group and 100 individuals were healthy and non al qat chewers as a control group. Their ages ranged between 20 to 68 years and they are all males.

Buccal smears were prepared fixed and stained by using papanicolaou stain and examined under light microscope.

The cytological assessment among study group revealed the following findings: 15(7.5%) dyskaryosis of the case, hence no dyskaryosis was detected among control. 26(13%) inflammatory cells were detected in 18(9%) of case and in 8(4%) in control. These findings indicating that all qat chewer is a risk factor for oral cytological changes and this was found statistically significant (P. value < 0.05).

The study found a significant relation between cytological changes in buccal mucosa and duration and intensity of all qat chewing (P. value < 0.05).

This study concluded that all qat chewing causing cytological changes in buccal mucosa, these changes depend on the duration and intensity of all qat chewing.

اجريت هذه الدراسة الوصفيه فى مدينه صنعاء( اليمن) فى الفتره مابين مارس الى اغسطس 2011. هدفت الدراسة الى دراسه النمط الشكلى الخلوى للطبقه المخاطيه للفم للاشخاص الماضغين للقات,وذلك باستخدام تقنيه علم الخلايا

تم جمع العينات من 200 فرد تم تقسيمهما على النحو التالى, 100فرد مستخدمين القات كفئه مستهدفه للدراسه و 100الاخرين اصحاء وغيرمستخدمين للقات كفئه ضابطه.تراوحت اعمارهم مابين 20 الى 68عاما وهم جميعا ذكور. تم جمع وتثبيت مسحات خلايا جدار الفم وصبغها بصبغه البابانيكولا وفحصها تحت المجهر الضوئى.اظهرالتقيم الخلوي للمجموعه تحت الدراسه وكانت النتائج ايجابيه كالاتى:15(7.5%) حالات سوء خلوى ضمن الفئه المستهدفه ولم تظهر ضمن الفئه الضابطه.وجدت الخلايا الالتهابيه فى 26(13%) كانت 18(4%) ضمن الفئه الفامشهدفه و (4%%) ضمن الفئه الضابطه

هذه النتائج تؤكد ان القات من العوامل المسببه للتغيرات الخلويه للفم احصائيه (P. value < 0.05). وكانت النتائج ذات دلاله

توصلت الدراسه الى وجود علاقه بين التغيرات الخلويه للفم ومده وكثافه مضغ القات

.(P. Value < 0.05)

خلصت الدراسة الى ان مضغ القات يؤدى الى التغيرات الخلويه للفم,وهذه التغيرات تعتمد على مده وكثافه مضغ القات.

#### **List of Contents**

NO	Subject	Page
	Dedication	I
	Acknowledgment	II
	Abstract English	III
	Abstract Arabic	IV
	List of content	V
	List of Tables	X
	List of microphotographs	XI
	Chapter (1) Introduction	•
1	Introduction	1
2-13	Objectives	2
2-13-1	General objective	2
2-13-2	Specific objective	2
	Chapter (2) Literature Review	<u> </u>
2	Literature Review	3
2-1	Anatomy and histology of oral cavity	3
2-1-1	Lips and cheeks	3
2-1-2	Tongue	4

2-1-3	Gingiva	4
2-1-4	The palate	4
2-1-5	The teeth	4
2-1-6	Gums	4
2-2	Cytology of oral cavity	4
2-2-1	Squamous epithelial cells	4
2-2-2	Other cells	5
2-3	Oral Diseases	5
2-3-1	Bacterial infections	5
2-3-1-1	Acute Ulcerative Gingivitis	5
2-3-1-2	Actinomycosis	5
2-3-1-3	Tuberculosis	6
2-3-1-4	Syphilis	6
2-3-1-5	Gonorrhea	6
2-3-2	Viral infections	6
2-3-2-1	Herpes Simplex virus (HSV)	6
2-3-2-2	Human Immunodeficiency Virus (HIV)	6

2-3-2-3	Human papilloma virus (HPV)	7
2-3-3	Fungal infection	7
2-3-3-1	Oral Candidiasis	7
2-4	Oral cancers	7
2-5	Oral cytological atypia	8
2-6	Benign Degenerative Changes	8
2-7	History of Qat chewing	9
2-8	Distribution of Qat use around the world	9
2-9	Chemistry of Qat	10
2-10	Effects of Qat in oral cavity	10
2-11	Techniques for cytology	12
2-11-1	Specimen collection of cytology	12
2-11-2	Transport and information	12
2-12	Staining of cytology	13
Chapter (3) Materials and Methods		
3-1	Study design	15

3-2	Study area	15
3-3	Study population	15
3-4	Sampling	15
3-4-1	Sample size	15
3-4-2	Sample collection	15
3-5	Materials	15
3-6	Data analysis	16
3-7	Ethical consideration	16
Chapter (4) Results		
4	Results	17
Chapter (5) Discussion		
5	Discussion	30
	Chapter (6) Conclusion and Recommendations	
6	Conclusion and Recommendations	32
6-1	Conclusion	32
6-2	Recommendations	32
Chapter (7) References		

7	References	33
	Appendices	
	Appendices	38

## **List of Tables**

Table	Title	Page
NO		NO
1	Frequencies of age group among study population	19
2	Frequencies of education among study population	20
3	Distribution of cytological results among study population	21
4	Duration of al qat chewering per years	22
5	Intensity of al qat chewering per hours/day	23
6	Relation between cytological results and age group of al qat chewers.	24
7	Relation between cytological results and duration of al qat chewing per years.	25
8	Relation between cytological results and intensity of al qat chewing per hours / day.	26

# **List of Microphotographs**

Microphotography	Title	Page
NO		NO
1	Buccal smear, showing normal buccal	27
	smear	
2	Buccal smear, showing inflammatory cells	28
3	Buccal smear, showing dyskaryosis of squamous cell	29