

原文題目(出處)：	Lesions of the oral mucosa: an epidemiological study of 23785 Mexican patients Oral Surg Oral Med Oral Pathol Oral Radiol Endod 2008;105:79-85
原文作者姓名：	José L. Castellanos, Laura Díaz-Guzmán
通訊作者學校：	León, Guanajuato, Mexico DE LA SALLE BAJÍO UNIVERSITY
報告者姓名(組別)：	楊超捷 (L 組)
報告日期：	97-3-17

名詞解釋：

流行 **Epidemic**: 疾病發生數超過以往經驗的期望值(Expected value)

The **prevalence** of a disease: the *total* number of cases in a particular population at a particular point in time,

The **incidence** of a disease: the number of *new* cases in a particular population during a particular time interval

發病率 (千分率、萬分率) incidence rate	某年內某病新病例數/同年平均人口數×K	是衡量疾病發生頻度的指標，常用於研究疾病發生的因果的評價預防措施的效果，一般以縱觀一年為期
患病率 (%) prevalence rate	觀察某時點某病現患人數/同時點暴露人口數×K	是觀察某時點斷面上人群現存某病的頻度，又稱現患率。它從時點斷面觀察疾病頻度，是與發病率的主要區別

The term **morbidity rate** can refer either to the incidence rate or to the prevalence rate of a disease

內文：**Introduction**

1. Oral mucosal lesions 在 15歲以上,不分男女並且是選擇在dental school 進行 dental care 的人之盛行率
2. 雖然在dental school所選取的樣本必非開放且隨機的，但是跟一般其他像是 specialty centers, nursing homes and veterans facilities, 有進行biopsy 服務的醫院所做出的盛行率比較起來，是可以作為一般大眾的一個model
3. 蒐集了22年共23785 patients的data,其中包括了7297位有進行7.5年的f/u評估

Material and Method

1. 23785 patients more than 15 years of age who requested elective dental care from January 1982 to December 2003
2. 每一個懷疑的lesion都是由dental school 學生在老師的陪伴幫助下進行問診所下的診斷，若有需要還有進行輔助性的studies, 例如laboratory tests and histopathologic evaluation
3. 每位病人都會取得下列資料: **identification of the lesion or condition**, the **underlying etiology**, and patient **age and sex**
4. 把資料作5種分類 (1) clinical characteristics (2) etiology (3) general prevalence, with identification of the **30 most frequent lesions**, (4)**sex distribution and mean age**, with identification of **the 15 most frequent lesions per sex**, and (5) major lesion groups and specific lesion, 並以number of lesions per 1000來計算

Result

1. 出現lesion的機率是356.60 lesions per 1000 patients

2. 有出現lesion的平均年齡為38.55歲
3. 男性出現lesion的機率較高 **male : female ratio =1.4:1**
4. 就morbidity而言男生是女生的三倍
5. 總共檢查出68種不同的lesion

Table I. Clinical appearance of lesions of the oral mucosa in 23785 patients

	<i>No. of lesions per 1,000 patients</i>			<i>Average Age (y)</i>
	<i>Male</i>	<i>Female</i>	<i>Total</i>	
Superficial changes				
White nonkeratotic (4)	148.76	88.50	107.34	32.90
Red (12)	93.88	75.47	81.23	39.88
Ulcers/vesicles (9)	64.56	54.25	57.47	37.83
White keratotic (9)	67.11	29.11	40.99	42.59
Color (8): endogenous and exogenous pigments	27.21	27.79	27.61	41.11
Fissure lesions and pits (6)	6.46	7.77	7.36	36.93
Soft tissue masses				
Nonneoplastic (13)	34.70	40.73	34.64	36.98
Reactive, hyperplastic, hamartomatous, and cystic				
Neoplastic (6)	3.50	4.65	4.29	38.82
Miscellaneous (1)	0.00	0.06	0.04	36.00
Total	442.68	323.69	352.39	38.20

1. 作者將oral lesion分成3大類1.Superficial change; 2.Soft tissue masses
3. Miscellaneous
2. Pit是指像是hollow fovea or indentation, such as commissural lip pits
3. 其中以White, red, and ulcerated lesions 占較多數

Table II. Etiopathogenesis of lesions of the oral mucosa in 23785 patients

<i>Catagory</i>	<i>Etiopathogenesis</i>	<i>No. lesions per 1000 patients</i>	<i>Relative %</i>	<i>Accumulative %</i>
I	Morphogenetic disorders	115.32	32.73	
II	Reactive	85.80	24.35	57.07
III	Traumatic	70.17	19.91	76.99
IV	Infectious	37.50	10.64	87.63
V	Factitious	22.70	6.44	94.07
VI	Growths and neoplasms	10.64	3.02	97.09
VII	Immune	10.09	2.86	99.95
VIII	Systemic diseases	0.17	0.05	100.00
		352.39	100.00	

1. 以etiopathogenic方面做分析共8總
2. 76.99% corresponded to the first 3 groups 其中以**morphogenetic disorders** 為大宗

TABLE III. Lesions of greatest prevalence in the oral mucosa of 23785 patients

Lesion	Male n = 7435	No. of lesions per 1000 patients	Female n = 16350	No. of lesions per 1000 patients	Total n = 23785	No. of lesions per 1000 patients	Age (y)
Leukoedema	1086	146.07	1420	86.85	2506	105.36	32.50
Traumatic ulceration	333	44.79	624	38.17	957	40.24	31.64
Frictional keratosis	377	50.71	388	23.73	765	32.16	37.03
Traumatic erythema	245	32.95	435	26.61	680	28.59	32.90
Morsicatio buccarum	236	31.74	280	17.13	516	21.69	27.36
Chronic atrophic candidiasis	118	15.87	361	22.08	479	20.14	52.48
Melanotic maculae of the lip*	25	13.27	67	17.71	92	16.23	31.14
Inflammatory fibrous hyperplasia	92	12.37	285	17.43	377	15.85	42.51
Smoker melanosis*	25	13.27	34	8.99	59	10.41	49.46
Apthous ulcer	68	9.15	136	8.32	204	8.58	30.45
Lip herpes	72	9.68	116	7.09	188	7.90	32.26
Benign migratory glossitis	70	9.41	111	6.79	181	7.61	31.97
Nicotinic stomatitis	72	9.68	28	1.71	100	4.20	47.88
Angular cheilitis	26	3.50	60	3.67	86	3.62	47.94
Nevi	23	3.09	52	3.18	75	3.15	36.63
Epulis fissuratum	15	2.02	59	3.61	74	3.11	59.61
Papilloma	14	1.88	55	3.36	69	2.90	38.67
Inflammatory papillary hyperplasia	21	2.82	38	2.32	59	2.48	50.58
Hemangioma	20	2.69	34	2.08	54	2.27	48.65
Erythema of unidentified cause	20	2.69	30	1.83	50	2.10	38.10
Gingival hyperplasia	15	2.02	30	1.83	45	1.89	39.64
Hairy tongue	20	2.69	20	1.22	40	1.68	38.13
Phenytoin gingival hyperplasia	11	1.48	23	1.41	34	1.43	28.82
Mucocele	12	1.61	22	1.35	34	1.43	28.68
Reticular lichen planus	8	1.08	21	1.28	29	1.22	44.31
Fibrosis and scar tissue	11	1.48	12	0.73	23	0.97	28.00
Leukoplakia	13	1.75	10	0.61	23	0.97	51.00
Chemical burns	7	0.94	14	0.86	21	0.88	32.10
Pyogenic granuloma	6	0.81	14	0.86	20	0.84	42.15
Verruca vulgaris	2	0.27	17	1.04	19	0.80	36.68
	3063	431.78	4796	313.85	7859	350.71	38.98

M = 1884.

F = 3784.

*Rates based on 5668 patients. Those entities were considered after 1999 (M = 1884, F = 3784).

1. 依照prevalence排序舉出前30種最常見的oral lesion而這30總lesion佔種lesion數的98.33%，盛行率從最高105/1000 到最低0.8/1000
2. 至於其他38種的lesion 盛行率都低於0.55/1000
3. 發現其lesion的平均年齡大於50歲的有1. epulis fissuratum 2. chronic atrophic candidiasis 3. leukoplakia 4. Smoker melanosis
4. 平均年齡較小的有1.morsicatio buccarum 2.fibrosis and scars 3.mucocele.

TABLE IV. Characteristics by patient gender

Lesion	Male		Lesion	Female	
	n = 7435	No. of lesions per 1000 patients		n = 16350	No. of lesions per 1000 patients
Leukoedema	1086	146.07	Leukoedema	1420	86.85
Frictional keratosis	377	50.71	Traumatic ulcer	624	38.17
Traumatic ulcer	333	44.79	Traumatic erythema	435	26.61
Traumatic erythema	245	32.95	Frictional keratosis	388	23.73
Morsicatio buccarum	236	31.74	Chronic atrophic candidiasis	361	22.08
Chronic atrophic candidiasis	118	15.87	Melanotic maculae of the lip*	67	17.71
Melanotic maculae of the lip*	25	13.27	Inflammatory fibrous hyperplasia	285	17.43
Smoking melanosis*	25	13.27	Morsicatio buccarum	280	17.13
Inflammatory fibrous hyperplasia	92	12.37	Smoking melanosis*	34	8.99
Lip herpes	72	9.68	Apthous ulcers	136	8.32
Nicotinic stomatitis	72	9.68	Lip herpes	116	7.09
Benign migratory glossitis	70	9.41	Benign migratory glossitis	111	6.79
Apthous ulcers	68	9.15	Angular cheilitis	60	3.67
Angular cheilitis	26	3.50	Nevi	52	3.18
Nevi	23	3.09	Nicotinic stomatitis	28	1.71
	2868	405.56		4397	289.44
Risk index		1.41			0.66
Risk index. M:F proportion		2.15			

M = 1884.

F = 3784.

*On the basis of 5668 patients after the year 1999.

1. 依照性別區分,前15種常見的oral lesion的morbidity

2. 這樣分類的目的是爲了去了解是否因爲biologic factors, psychological aspects, 或social role 而造成不同的risk rate
3. 男:女的morbidity rate→ 2.15:1 lesion find rate→ 1.25:1 (total group 1.4:1, 3.0:1) 以男性較高
4. nicotinic stomatitis 男性爲女性的5.1倍

Discussion

TABLE V. Comparative analysis with other major epidemiological studies

Lesion	No. of lesions per 1000 patients				Coincidence among the 4 studies		
	I*	II†	III‡	IV§	Times	%	
Leukoedema	105.36	459.3 (1)			2	50	
Traumatic ulcer	40.24	17.8 (10)	5.2 (4)		3	75	
Irritative keratosis	32.16	43.7 (5)	4.7 (5)	26.7 (4)	4	100	
Traumatic erythema	28.59						
Morsicatio buccarum	21.69			30.5 (3)	2	50	
Chronic atrophic candidiasis	20.14			36.0 (1)	2	50	
Melanotic maculae of the lip	16.23	100.4 (2)			2	50	
Inflammatory fibrous hyperplasia	15.85	20.7 (9)	12.0 (2)		3	75	
Smoking associated melanosis	10.41						
Minor recurrent aphthous ulcers	8.58						
Coincidence with present study		No. of rank in the study					
Times (%)		5	3	3			
Percent		50	30	30			

*Present study.

†Axéll (1975).¹

‡Bouquot (1986).²⁰

§Shulman (2004).²

1. 作者取其他三篇其他地區但是在樣本數和lesion 分類上較相似的report 來做比較
2. 作者以目前的數據和他們在1991年所做的數據比較，發現到10個項目中有6個項目的盛行率維持不變，因此盛行率發生改變的部份就需要考慮到
 1. diagnostic quality的進步
 2. 社會和生態上的變化
 3. 族群變化
 4. 醫藥的發達都會影響到族群壽命和生活品質
3. 就oral lesion 來說這四篇studies常見lesion 的相似率從50%~100%，其中 Irritative Keratosis是4篇中都在前10名的lesion, Traumatic ulcer and inflammatory fibrous hyperplasia 四篇中有三篇，因此作者做了一個結論 lesions of a traumatic origin are those most commonly reported in different parts of the world
4. Labial melanotic macule, chronic atrophic candidiasis, and leukoedema likewise showed a high prevalence in 3 of the 4 studies
5. leukoedema 是最常見的oral lesion, 幾乎佔了所有lesion的一半(44.26%)
6. 在table III中可見到不少irritative etiology 的lesion ,traumatic ulcer, irritative keratoses, traumatic erythema, morsicatio buccarum, labial melanotic macule, irritative hyperplasia, and smoking- associated melanosis, 這方面的lesion 傳達一個很重要的訊息，就是其實這方面lesion的morbidity 是可以靠著適當的 patient education and dental practice來改善
7. Morsicatio buccarum 的平均年齡最小，作者將這種現象歸因於psychological reactions to anxiety or self-aggression



8. epulis fissuratum, inflammatory papillary hyperplasia, and chronic atrophic candidiasis 這些lesion出現在較為年長的病人身上，作者推論這起因於年長者因caries 或是periodontitis 所造成的牙齒缺失而需要配戴全口或是活動牙，如果設計不良或清潔不佳所引起的。
9. 在這份studies中男性口中發現oral lesion 的機率是女性的兩到三倍(Fig. 1 and Table IV). The 分析發現可能是因為生理上,文化上或社會觀點的差異所造成。
10. The majority of lesions identified and their causes , in this and in other similar studies, are largely avoidable and can be controlled through education 。

題號	題目
1	Cross-section study 橫斷研究法又稱為?? (A) 發生率研究法(incidence study) (B) 盛行率研究法(prevalence study) (C) 縱向研究法(longitudinal study) (D) 前瞻性研究法(prospective study)
答案(B)	出處： https://teb.cdc.gov.tw/ 網站
題號	題目
2	下列 oral lesion 何者在女性中較為常見? (A) Leukoedema (B) Nicotinic stomatitis (C) Epulis fissuratum (D) Traumatic ulcer
答案(c)	出處：Oral and Maxillofacial pathology P.366