
 رزان خطاب*

29.8) 49-9 (14 20) 34
 ,(11.8 =) 30-2 ,(
 - -

Correlation (r)

%41 5 < %76,4
 %64

10-5 (%72)

(32-20)

Progression of Periodontal Disease in Patients with Phenytoin Gingival Overgrowth

Razan Khattab *

Abstract

Gingival overgrowth (GO) is one of many side effects of phenytoin (PHE) antiepileptic agent. The aim of this study was to evaluate the development of periodontitis in patients taking PHE and its relation with GO, age, duration of drug administration.

Thirty-four patients (14 females, 20 males; range 9-49 years; mean age 29.5) undergoing PHE treatment (range 2-32 years; mean 11.8) from the department of periodontology, faculty of dentistry, Damascus University was included in the study. Medical history including drug duration and clinical measurement of GO index, probing depth (PD) periodontal pocket bleeding points index (BPI) and panoramic radiographs for bone loss (BL), were performed for each patient. For statistical analysis Correlation test (r) was used to determine the correlation between age, duration and periodontal indices.

76.4% of the examined patients showed mean PD value >5mm and 41% showed moderate to severe BL, whereas, GO was noted in 64%. Statistical analysis showed significant correlation between PD with GO, BPI, BL, age and duration. Positive correlation was noted between GO, periodontal index, age and duration, the correlation between GO and age was higher in younger patients. The relation between duration and GO reaches (72%) in (5-10 years); that becomes negative with increasing time. However PD and BL presented a positive correlation with age and increased in long duration of drug administration (20-32 years).

Periodontal index and GO were clearly correlated with PHE administration. Long-term of drug administration could create the adequate conditions to periodontal disease progression.

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Drugs induce Gingival)
(overgrowth
(1996) Seymour 3 (1) (AAP 1999)

(4) - :
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TGF-1 β .(2)(
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(periodontitis
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(33-26)

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20

Montebugnoli

1996

Nunn et Harrel "

2001

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Romito

(20)

,2003

(32-20)

(21)

,2004⁽²²⁾

A.a, Pg, Pi,

Fusobacterium, M. micros ,

Keglevich

2002

(18) 13

IL-1

(26) (25) PGE2 (23)

(27)

(24)

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(28)

IL-6 TNF- α IL-1 β

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		1	0.56
	1	0.24	0.53
1	0.14	-0.10	0.37

1 :

Correlation (r)

49-34	34-26	26-9	20-9	49-9	/
-0.12	-0.02	0.26	0.72	0.13	
0.60	-0.04	0.55	0.91	0.32	
0.40	-0.07	0.76	0.91	0.42	
0.90	-0.46	0.06	0.46	-0.08	

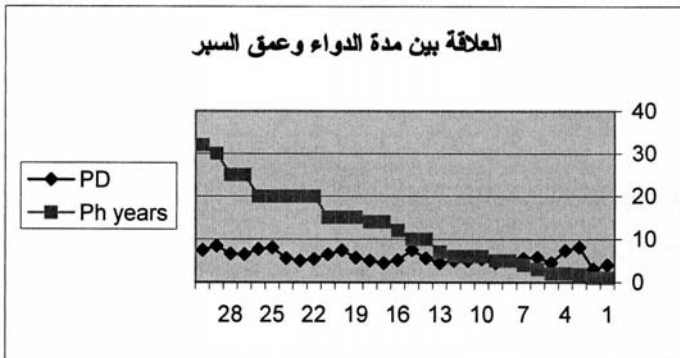
:2

Correlation (r)

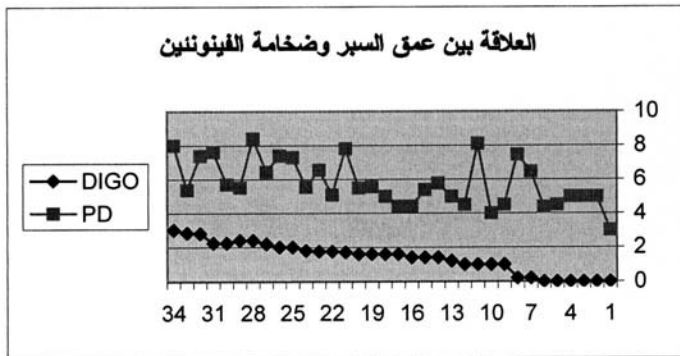
32-20	20-15	15-10	10-5	5-1	30-2	/
-0.08	0.02	0.45	0.72	0.09	0.48	
0.67	-0.09	0.36	0.60	0.15	0.39	
0.56	-0.05	0.26	-0.10	0.42	0.27	
-0.16	-0.28	0.28	0.13	-0.48	-0.24	

:3

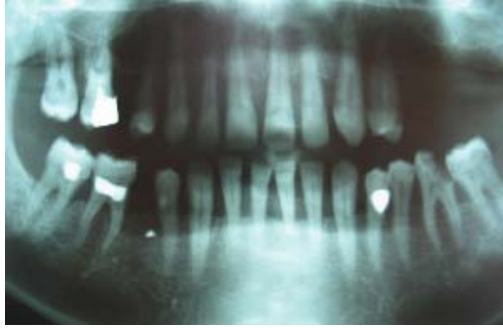
Correlation (r)



مخطط ١



مخطط ٢



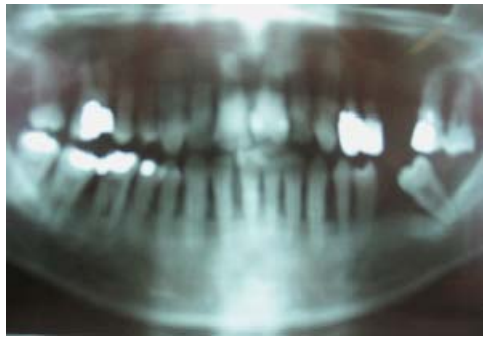
30

38

-1

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$$1.55 \quad / 8.3 =$$



25

40

-2

$$/ 5.3 =$$

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