

Malattia Parodontale e Patologie Sistemiche: sviluppo di un nuovo modello di clinica integrata

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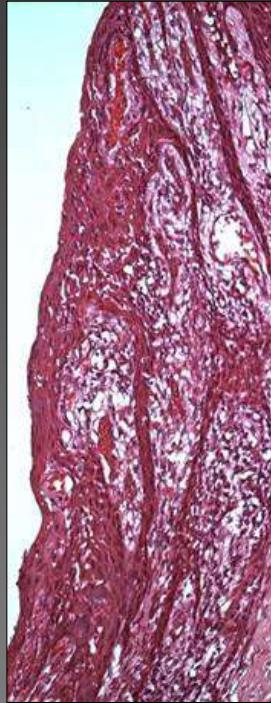


U.O. Odontostomatologia
e Chirurgia Orale Universitaria
Azienda Ospedaliero Universitaria Pisana

Periodontitis

...susceptible patients...

Attachment Loss



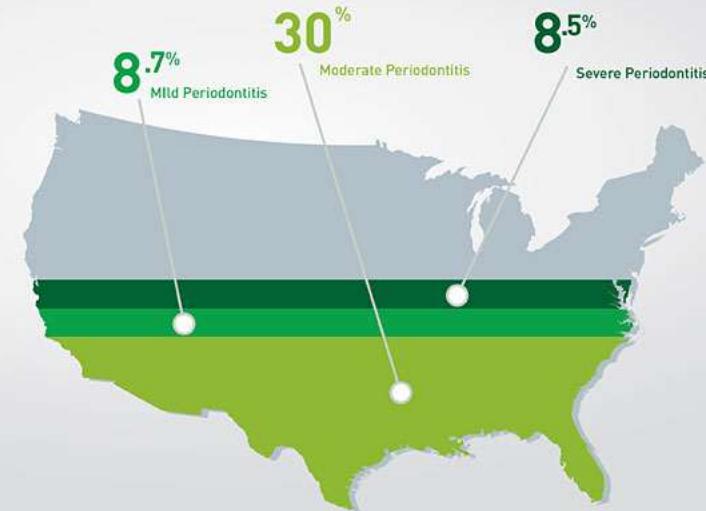
Bacterial Component

Component

* THE AMERICAN ACADEMY OF PERIODONTOLOGY WARNS OF A SIGNIFICANT PUBLIC HEALTH PROBLEM

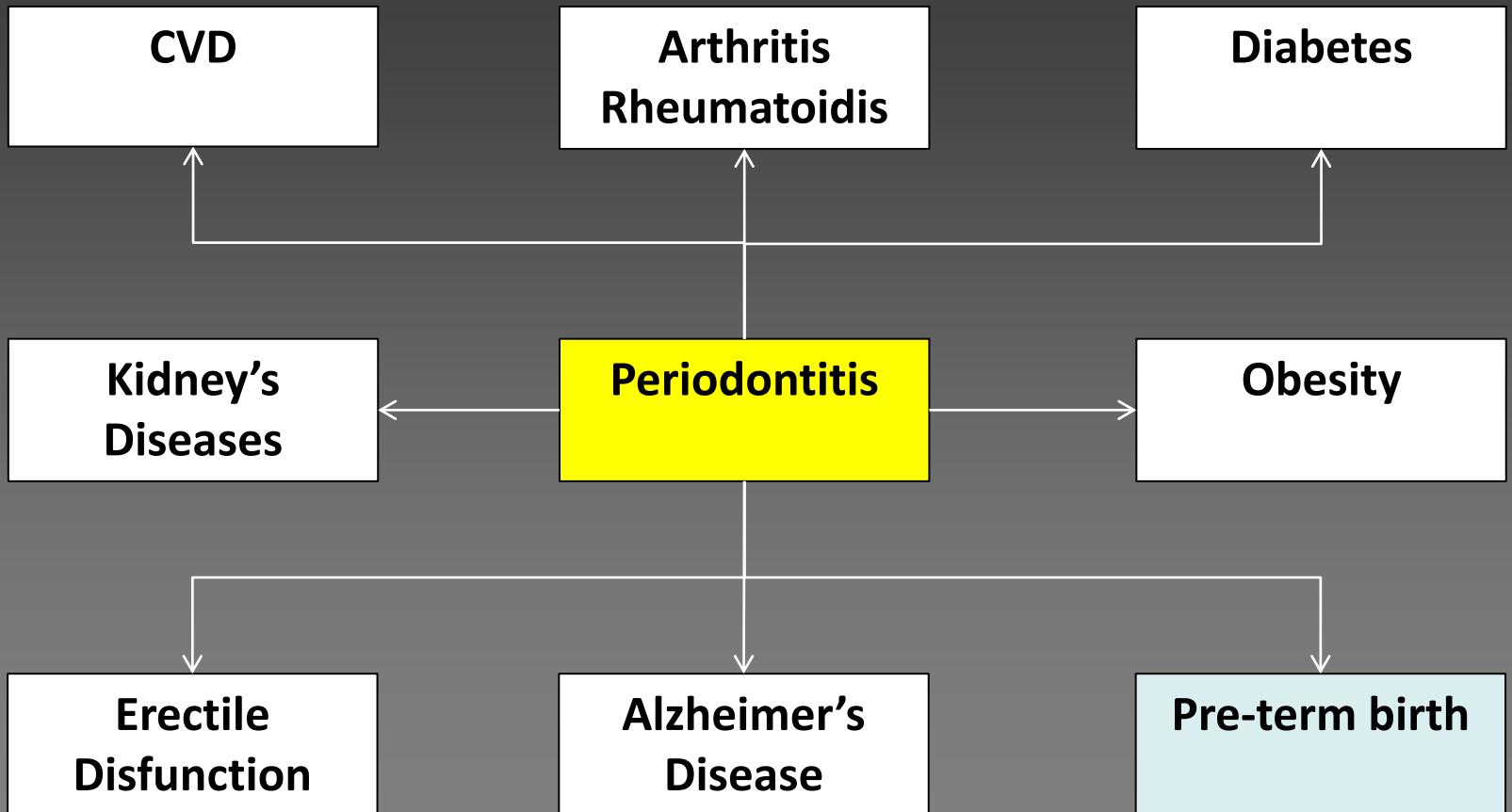
HALF OF AMERICAN ADULTS SUFFER FROM GUM DISEASE

47.2%
Have periodontitis
THAT'S
64.7
Million
Adults 30 years
and older



*SOURCE: P.J. Eke, B.A. Dye, L. Wei, G.O. Thornton-Evans, and R.J. Genco. Prevalence of Periodontitis in Adults in the United States: 2009 and 2010. J DENT RES 0022034512457373, first published on August 30, 2012 as doi:10.1177/0022034512457373

sequela



Periodontal and systemic diseases

Periodontitis

Bacterial invasion
Bactaeremia

Risk Factors
Compartecipation

Epithelial disruption

A.a. invades
tissue



II 1 DCE

Schenkein, Barbour, Berry, Kipps, Tew

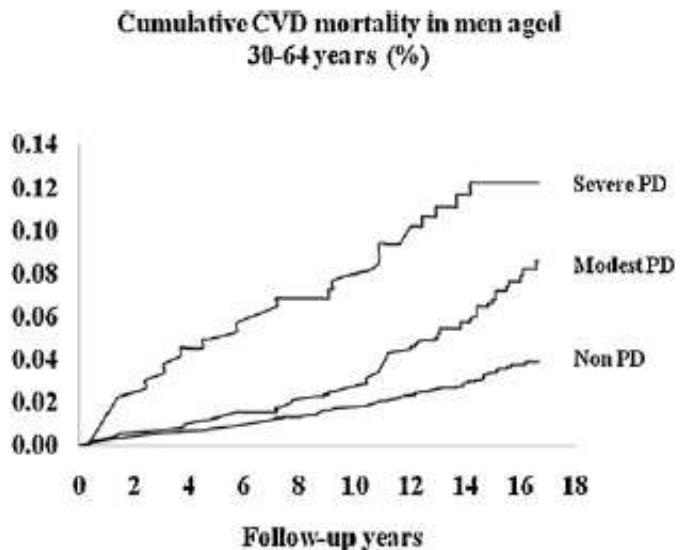
Invasion of human vascular endothelial cells by A.a via the receptor for platelet-activation factor.
Infect Immun. 2000;68:5416-5419.



Page RC
The pathobiology of periodontal diseases:
inversion of a paradigm.

Ann Periodontol. 1998 ; 3:108-120.

CRP levels in mg/l between periodontitis patients



Parameter	Patients with CPITN score 0-2 (n = 49)	Patients with CPITN score 3-4 (n = 50)	P
LVM (g)	220.3 ± 66.4	257.3 ± 67.9	<0.01
LVMI (g/m ²)	92.6 ± 24.8	105.8 ± 23.6	<0.01
Presence of LVH (%)	6.1	18	0.07
Aortic systolic pressure (mm Hg)	116 ± 15	124 ± 17	<0.05
Aortic diastolic pressure (mm Hg)	78 ± 9	79 ± 10	0.56
Aortic pulse pressure (mm Hg)	38 ± 10	45 ± 11	<0.05
PWV (m/s)	7.9 ± 1.2	8.3 ± 1.5	0.15

Values (except LVH) are expressed as mean ± s.d. LVH defined as LVMI ≥ 110 g/m² in women or ≥ 135 g/m² in men.

CPITN, Community Periodontal Index of Treatment Needs; LVH, left ventricular hypertrophy; LVM, left ventricular mass; LVMI, left ventricular mass index; PWV, pulse wave velocity.

Xu & Lu

Prospective association of periodontitis with cardiovascular and all-cause mortality:
NHANES III follow-up study

Atherosclerosis

2011; 218, 536–542



Franek, Klamczynska, Ganowicz, et al.

Association of chronic periodontitis with left ventricular mass in treated patients with essential hypertension.

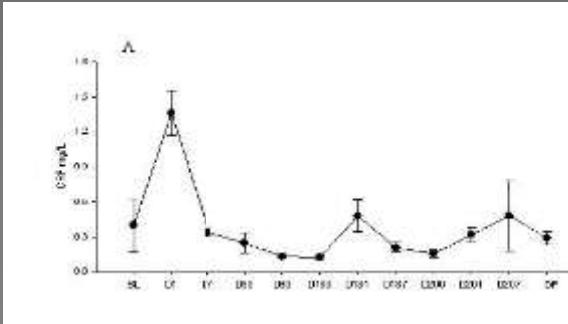
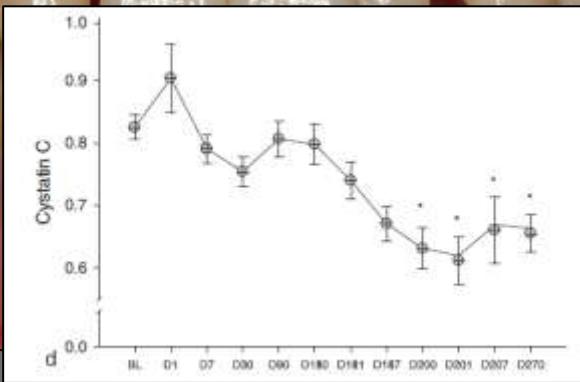
American Journal of Hypertension
2009;22:203–7.





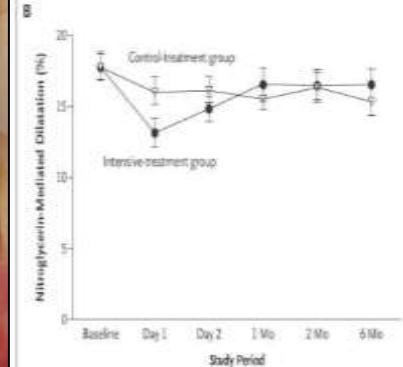
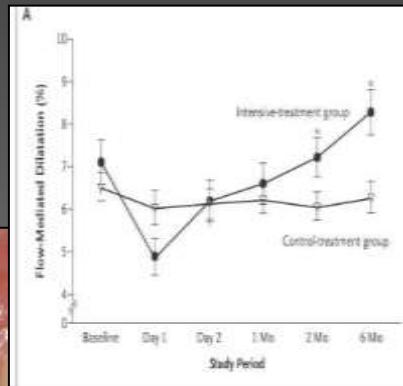
Graziani et al.
**Systemic inflammation following
non-surgical and surgical
periodontal therapy**

Journal of Clinical Periodontology
2010 Sep;37(9):848-54.

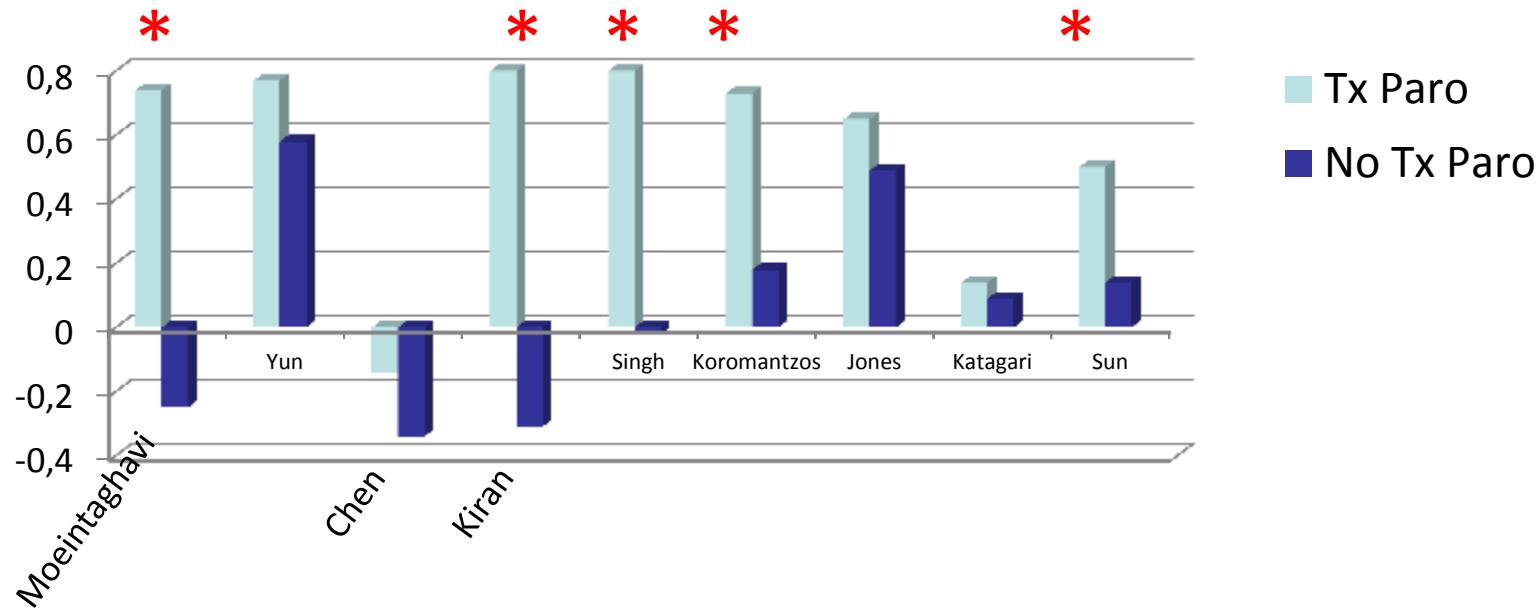


Tonetti et al.
**Treatment of periodontitis and
endothelial function**

N Engl J Med. 2007 Mar 1;356(9):911-
20



HbA1c Reduction 3 months after periodontal TX



- 719 subjects
- Mean weighted difference: 0,36%
(95% CI -0,54 to -0,19%)
- Heterogeneity: $I^2 = 9\%$



Engebretson & Kocher
Evidence that periodontal treatment improves diabetes outcomes: a systematic review and meta-analysis.
Journal of Clinical Periodontology
2013; 40 (Suppl. 14): S153–S163



Periodontal disease as emergent systemic pathology University Hospital of Pisa

[HOME](#)[THE PROJECT](#)[CLINICAL ACTIVITIES - STAFF](#)[CONTACTS](#)

Welcome to the website of the project "Periodontal disease as emergent systemic pathology: development of a new clinical unit for patients global care" funded by the Ministry of Health and the Tuscany Region.

Aim of this project is to develop and facilitate the creation of one or more multidisciplinary clinical centers with the main objective of promoting the clinical diagnosis and treatment of chronic pathologies through the control of gingivitis/periodontitis. Scientific literature has shown a biological and epidemiological correlation between gingival pathologies and certain systemic conditions such as diabetes, obesity and metabolic syndrome, cardiovascular and rheumatologic diseases. Furthermore, it was shown that



Impact of Periodontal Therapy on General Health

Evidence from Insurance Data for Five Systemic Conditions

Marjorie K. Jeffcoat, DMD, Robert L. Jeffcoat, PhD, Patricia A. Gladowski, RN, MSN,
James B. Bramson, DDS, Jerome J. Blum, DDS

Periodontal treatment was associated with statistically significant decreases in annual medical costs:

Patients with diabetes: 40% or \$2,840 per year decrease

Patients with cerebral vascular disease: 41% or \$5,681 per year decrease

Patients with coronary artery disease: 11% or \$1,090 per year decrease

Patients who became pregnant: 74% or \$2,433 per year decrease

Conclusions

- Periodontal Treatment determine not only tooth retention but also significant systemic effects
- These effects show a tangible cost-benefit efficacy
- This multidisciplinary treatment activity may be a model for spin-off within both SSN and private health care.

The banner features the University of Pisa logo (a circular emblem with a figure and Latin text) on the left and right sides. The central text reads:

UNIVERSITÀ DI PISA
CORSO DI PERFEZIONAMENTO
GESTIONE, MANAGEMENT E MARKETING
DELLO STUDIO ODONTOIATRICO
30-31 MAGGIO, 27-28 GIUGNO, 26-27 SETTEMBRE 2014
50 CREDITI ECM

Below the text is a collage of five photographs showing various healthcare professionals (doctors, nurses, and patients) in clinical settings.