

Supplementary material has been published as submitted. It has not been copyedited or typeset by *Acta Odontologica Scandinavica*.

Supplemental material

Association of periodontal condition with insulin sensitivity—results of the Oulu1935 Cohort study

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Running title: Periodontal condition and insulin sensitivity

Keywords: Epidemiology; Insulin resistance; Periodontal Diseases; Longitudinal Studies; Oral health

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Number of tables: 1 supplementary table

Supplementary Table 1. General characteristics of the non-smoking[†] participants without SIRM[‡] ($n = 145$) according to the categories of periodontal condition at baseline in 1990–1992

	Periodontal condition				
	Dentate without periodontal pockets (probing pocket depths [PPDs] < 4 mm)	Dentate with 1–6 sites with periodontal pockets (PPD ≥ 4 mm)	Dentate with ≥7 sites with periodontal pockets	Edentulous	Total
Sex (baseline data), n (%)					
Men	20 (54)	17 (36)	12 (48)	8 (22)	57 (39)
Women	17 (46)	30 (64)	13 (52)	28 (78)	88 (61)
Number of teeth (baseline data), mean (SD)	15.4 (9.1)	18.1 (7.9)	20.5 (7.2)	—	17.7 (8.3) [§]
Reduced insulin sensitivity [¶] (follow-up data), n (%)					
Yes	6 (19)	15 (32)	3 (12)	10 (28)	34 (31)
No	31 (81)	32 (68)	22 (88)	26 (72)	111 (69)
Educational level (baseline data), n (%)					
Basic	29 (78)	35 (74)	15 (60)	33 (92)	112 (77)
Intermediate	4 (11)	5 (11)	7 (28)	2 (5)	18 (13)
High	4 (11)	7 (15)	3 (12)	1 (3)	15 (10)
Annual household income (baseline data), n (%)					
<€20,400	8 (22)	7 (15)	6 (24)	9 (25)	30 (21)
€20,400–30,599	8 (22)	15 (32)	2 (8)	13 (36)	38 (26)
€30,600–40,800	7 (19)	12 (26)	8 (32)	7 (19)	34 (23)
>€40,800	11 (29)	10 (21)	7 (28)	5 (14)	33 (23)
Missing data	3 (8)	3 (6)	2 (8)	2 (6)	10 (7)
Familial aggregation of diabetes mellitus (follow-up data), n (%)					
Low risk	18 (49)	26 (55)	17 (68)	20 (56)	81 (56)
Increased risk	19 (51)	21 (45)	8 (32)	16 (44)	64 (44)
Physical activity (baseline data), n (%)					
High physical activity	28 (76)	39 (83)	15 (60)	29 (80)	111 (77)
Low physical activity	9 (24)	6 (13)	10 (40)	6 (17)	31 (21)
Missing data	0 (0)	2 (4)	0 (0)	1 (3)	3 (2)
Food consumption habits (baseline data), n (%)					
Healthy diet	24 (65)	32 (68)	14 (56)	12 (33)	82 (57)
Moderately healthy diet	6 (16)	10 (21)	8 (32)	18 (50)	42 (29)

Unhealthy diet	4 (11)	3 (7)	2 (8)	6 (17)	15 (10)
Missing data	3 (8)	2 (4)	1 (4)	0	6 (4)
Smoking (follow-up data), <i>n</i> (%)					
Never smoker	21 (57)	27 (57)	10 (40)	16 (44)	74 (51)
Former smoker	16 (43)	20 (43)	15 (60)	20 (56)	71 (49)
Smoker	0	0	0	0	0
Waist circumference (WC [cm] [follow-up data]), mean (SD)	88.3 (6.9) (M) 78.1 (6.5) (W)	91.6 (6.0) (M) 77.4 (8.1) (W)	89.1 (5.5) (M) 78.8 (4.4) (W)	91.6 (7.2) (M) 80.5 (6.5) (W)	89.9 (6.4) (M) 78.7 (6.9) (W)
WC ^{††} (follow-up data), <i>n</i> (%)					
Normal	24 (65)	30 (64)	20 (80)	18 (50)	92 (63)
IRMC	13 (35)	17 (36)	5 (20)	18 (50)	53 (37)
WC change (cm) during the follow-up period ^{††} , mean (SD)	-1.8 (5.0)	0.1 (5.2)	-2.3 (6.3)	1.5 (5.7)	-0.4 (5.6)
WC change (cm) during the follow-up period ^{††} , <i>n</i> (%)					
WC change negative	24 (65)	25 (53)	17 (68)	14 (39)	80 (55)
0 ≤ WC change < 2	5 (13)	4 (9)	3 (12)	4 (11)	16 (11)
2 ≤ WC change < 4	4 (11)	8 (17)	2 (8)	4 (11)	18 (12)
WC change ≥ 4	4 (11)	10 (21)	3 (12)	14 (39)	31 (22)
Serum triglyceride level (follow-up data), mean (SD)	1.1 (0.4)	1.3 (0.7)	1.0 (0.4)	1.1 (0.4)	1.1 (0.5)
Serum high-density lipoprotein cholesterol level (follow-up data), mean (SD)	1.7 (0.5)	1.8 (0.5)	1.8 (0.4)	1.8 (0.5)	1.8 (0.5)
Arterial hypertension (follow-up data), <i>n</i> (%)					
No	15 (41)	25 (53)	9 (36)	15 (42)	64 (44)
Yes	13 (35)	16 (34)	13 (52)	13 (36)	55 (38)
Missing data	9 (24)	6 (13)	3 (12)	8 (22)	26 (18)

Abbreviation: SD, standard deviation.

[†]Current smokers excluded.

[‡]Participants with substantially increased risk of metabolic complications (SIRMC) excluded; waist circumference (WC) >102 cm for men and >88 cm for women on follow-up.

[§]Among dentate participants.

[¶]Defined based on the Quantitative Insulin Sensitivity Check Index (QUICKI) value in the lowest tertile of the study population (≤0.325). QUICKI was calculated according to the following equation: $1/[\log(I0) + \log(G0)]$, where I0 represents fasting insulin and G0 represents fasting glucose, both measured during the clinical examination.

^{††}The cut-off points for WC: normal, ≤94 cm for men and ≤80 cm for women; and increased risk of metabolic complications (IRMC), >94–102 cm for men and >80–88 cm for women.

^{††}Between the follow-up examinations in 1996–1998 and 2007–2008.