

UNIVERSITY OF BIRMINGHAM

Research at Birmingham

The Prevalence of Dental Implants and Related Factors in Patients with Sjögren Syndrome

Albrecht, Katinka; Callhoff, Johanna; Westhoff, Gisela; Dietrich, Thomas; Dörner, Thomas; Zink, Angela

DOI:

[10.3899/jrheum.151167](https://doi.org/10.3899/jrheum.151167)

License:

None: All rights reserved

Document Version

Peer reviewed version

Citation for published version (Harvard):

Albrecht, K, Callhoff, J, Westhoff, G, Dietrich, T, Dörner, T & Zink, A 2016, 'The Prevalence of Dental Implants and Related Factors in Patients with Sjögren Syndrome: Results from a Cohort Study', *The Journal of Rheumatology*, vol. 43, no. 7, pp. 1380-5. <https://doi.org/10.3899/jrheum.151167>

[Link to publication on Research at Birmingham portal](#)

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes permitted by law.

- Users may freely distribute the URL that is used to identify this publication.
- Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
- User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

Table 1: Self-reported demographic and clinical features of patients with Sjögren's syndrome and controls

	Patients	Controls
N	205	87
Age in years, mean \pm SD (range)	58.1 \pm 12 (24-80)	54.1 \pm 14 (19-76)
Education, compulsory (%)	20.3	8.5
Secondary (%)	38.1	40.2
Higher (%)	41.6	51.3
Smoking, never (%)	62.8	58.6
Former (%)	31.6	19.6
Current (%)	5.4	21.8
Age at onset of xerostomia, years, mean \pm SD (range)	42.4 \pm 14.2 (12-72)	-
Toothache last 4 weeks (%)	48.8	11.5
Bleeding of the gums last 4 weeks (Gingivitis) (%)	60.4	34.5
Self-reported periodontitis (%)	19.0	8.0
Current number of natural teeth, mean \pm SD (median)	21.2 \pm 7.3 (24)	23.8 \pm 4.7 (25)
Edentulous (%)	2.9	0
Removable partial prostheses (%)	23.0	19.5
Removable total prostheses (upper or lower jaw) (%)	12.8	3.5
Individuals with dental implants, n (%)	32 (15.6)	6 (6.9)

Values are given as mean, standard deviation (SD) or percentage (%)

Table 2. Mean number of teeth by age and previous as well as current oral problems in patients with Sjögren's syndrome

	%	Teeth, μ	P-value
Age, years			< 0.001
≤ 50	23.2	25.5	
51-60	33.5	20.7	
61-70	23.8	20.7	
>70	19.5	17.3	
Education			0.019
Compulsory	20.3	19.4	
Secondary	38.1	20.2	
Higher	41.6	22.8	
Years with oral dryness			0.01
≤ 10	33.5	23.0	
11-20	40.0	20.0	
> 20	26.5	19.0	
Current severity of oral dryness, Numeric Rating Scale (0-10)			< 0.001
0-2	16.1	25.4	
3-6	26.3	21.0	
7-10	57.6	20.1	
Self-reported frequent caries in adolescence			< 0.001
Yes	29.5	18.7	
No	70.2	22.3	
Self-reported frequently bleeding gums in adolescence			0.002
Yes	15.6	18.8	
No	84.4	21.7	
Self-reported periodontitis			< 0.001
Yes	19.0	17.7	
No	81.0	22.9	

Table 3. Dental implants in patients with Sjögren's syndrome and controls

	Patients	Controls
N	205	87
Participants with dental implants, n (%)	32 (15.6)	6 (6.9)
Number of dental implants ever, n	104	14
Current number of dental implants, n	100	14
Mean number of dental implants currently, mean \pm SD (range)	3.1 \pm 2.0 (1-8)	2.3 \pm 1.9 (1-6)
Age of participants with vs. without implants, years, mean	64.5 vs. 57.0	63.2 vs. 53.5
Number of teeth in participants with vs. without implants, mean	17.5 vs. 21.9	21.5 vs. 24.0
Age of the oldest of the current implant, years, mean \pm SD (median)	4.9 \pm 5.4 (3)	2.4 \pm 1.8 (2)
Removed implants, n (%)	4 (3.8)	0 (0)
Replaced implants, n (%)	1 (1.0)	0 (0)

Values are given as mean, standard deviations (SD) or percentage (%)

Table 4. Comorbid conditions and therapies in patients with and without dental implants

	Patients with dental implants	Patients without dental implants	P-value
N	32	173	
Age, mean	64.5	57.0	0.003
Osteoporosis (%)	15.6	24.3	0.28
Diabetes mellitus (%)	3.1	5.8	1.00
Cancer (%)	9.4	12.1	1.00
Hyperthyroidism (%)	12.5	11.6	0.77
Glucocorticoids (%)	53.1	61.9	0.35
Bisphosphonates (%)	3.1	12.7	0.14
Anticoagulants (%)	12.5	15.6	0.79
Anticonvulsants (%)	9.4	8.1	0.73
Chemotherapy (%)	3.1	7.5	0.70

Table 5. Attitudes towards dental implants of patients and controls without implants

	Patients	Controls	P-value
N	173	81	
I am not interested in dental implants (%)	54.1	51.3	0.68
I do not need / want dental implants (%)	40.1	52.5	0.065
I am afraid that dental implants would not integrate properly (%)	40.1	18.8	< 0.001
I am firmly determined to get dental implants (%)	14.6	20.0	0.28
I would like to have implants but cannot afford them (%)	33.3	21.1	0.097
I do not know enough about dental implants to form an opinion (%)	51.7	30.0	0.001