J Clin Periodontol

2016 May;43(5):390-400. doi: 10.1111/jcpe.12534. Epub 2016 Apr 13.

Clinical research activity in periodontal medicine: a systematic mapping of trial registers

Paul Monsarrat 1 2, Alessandra Blaizot 3, Philippe Kémoun 4, Philippe Ravaud 5 6 7, Cathy Nabet 8 9, Michel Sixou 8, Jean-Noel Vergnes

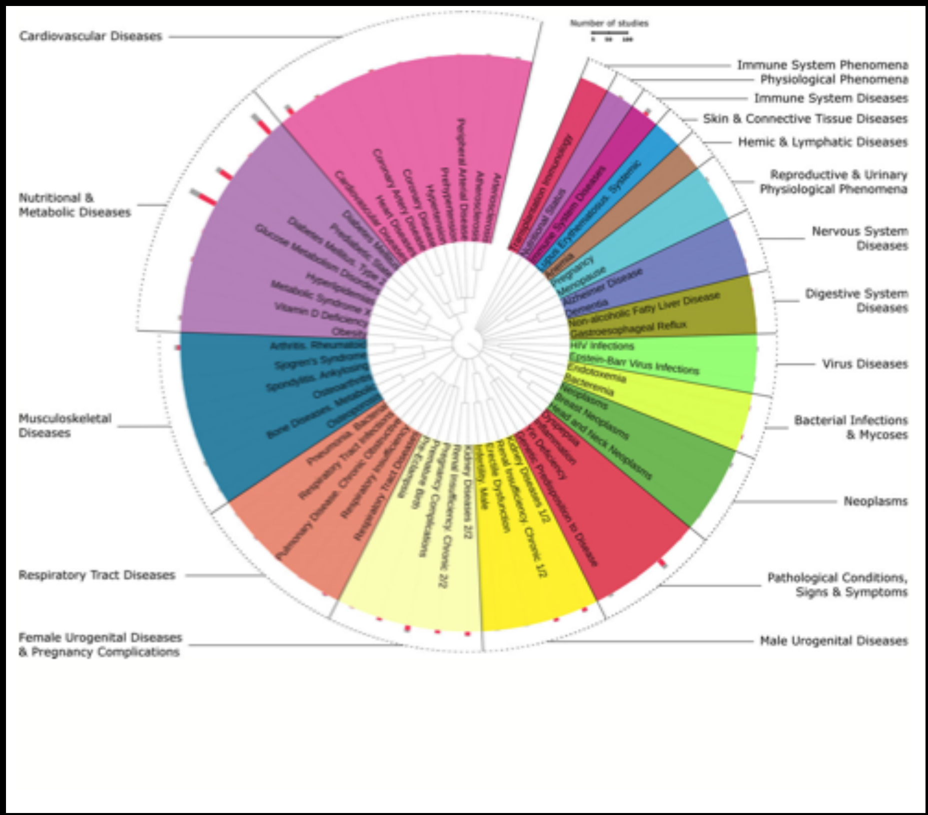
Abstract

Aim: The primary aim of the study was to systematically map registration records on periodontal medicine in clinical trial registers. The secondary aim was to assess the evolution of periodontal medicine in clinical periodontal research as a whole.

Material and methods: We searched all registration records related to periodontology in the World Health Organization International Clinical Trials Registry Platform. For registration records classified in the field of periodontal medicine, we assigned the 2015 MeSH(®) term for the most precisely corresponding systemic condition.

Results: Fifty-seven systemic conditions have been hypothesized to be linked with periodontal diseases, covering nearly 2% of the diseases indexed in MeSH. In addition to diabetes, cardiovascular disease or preterm birth, other systemic conditions have been the subject of registration records, such as anaemia, liver diseases, dyspepsia or ankylosing spondylitis. A trend towards increasing diversification of systemic conditions has appeared over time. About a third of registration records in clinical periodontal research deals with periodontal medicine.

Conclusions: Periodontal medicine now constitutes an important part of clinical periodontal research. Research activity in periodontal medicine has grown continuously since the early 2000s, and exploration of registers gives a useful up-to-date snapshot of this constantly evolving field of research.


Number of studies
Cardiovascular Diseases
Nutritional & Metabolic Diseases
Musculoskeletal Diseases
Respiratory Tract Diseases
Female Urogenital Diseases & Pregnancy Complications
Immune System Phenomena
Physiological Phenomena
Immune System Diseases
Skin & Connective Tissue Diseases
Hemic & Lymphatic Diseases
Reproductive & Urinary Physiological Phenomena
Nervous System Diseases
Digestive System Diseases
Virus Diseases
Bacterial Infections & Mycoses
Neoplasms
Pathological Conditions, Signs & Symptoms
Male Urogenital Diseases

J Clin Periodontol. Author manuscript; available in PMC 2015 Aug 31.

Published in final edited form as:
J Clin Periodontol. 2013 Apr; 40(0 14): S51–S69.
doi: 10.1111/jcpe.12060

PMCID: PMC4554326
NIHMSID: NIHMS438382
PMID: 23627334

Inflammatory Mechanisms Linking Periodontal Diseases to Cardiovascular Diseases

Harvey A. Schenkein and Bruno G. Loos
Author information Copyright and License information PMC Disclaimer

In this paper, inflammatory mechanisms that link periodontal diseases to cardiovascular diseases (CVD) are reviewed.

Conclusion:

The preponderance of the data appears to support the concept that periodontitis can contribute to systemic levels of inflammatory mediators and markers associated with increased risk for CVD. Studies in this regard support the concept that a variety of mechanisms that depend upon exposure of the oral microflora or components thereof to organs distant from the oral cavity are likely to account for these findings. Such organs likely include the liver, elements of the innate and adaptive immune systems, components of the coagulation and fibrinolytic systems, and the atheromatous lesion itself, leading to enhanced systemic levels of inflammatory mediators.

In otherwise healthy periodontitis patients, CRP levels are generally above the level shown in epidemiologic and intervention studies to be associated with elevated risk for CVD (Ridker and Silvertown, 2008). Treatment studies appear to show (Paraskevas et al., 2008) a modest decrease in CRP, indicating that either periodontitis makes a modest contribution to CRP levels in patients with other predisposing factors to systemic inflammation, or that end-points of periodontal therapy are difficult to reach even with aggressive treatment.