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

Paul Monsarrat, Alessandra Blaizot, Philippe Kémoun, Philippe Ravaud, Cathy Nabet, Michel Sixou, Jean-Noel Vergnes.


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Methods:

Study aims:
The aim of this study was to evaluate the topics in periodontal medicine: a systematic mapping of trial registers.

Background:
Relevant clinical research activity in periodontal medicine is increasing. However, the two-way relationship between periodontal diseases and systemic conditions is not fully understood.

The need for a structured and systematic overview of the current activity in the field of periodontal medicine was identified.

To achieve this, a search was conducted in the databases of clinical trials and observational studies.

These were included and classified into four categories:

- Category A: Periodontal intervention to improve (or prevent) a systemic condition;
- Category B: Intervention for a better understanding of the links between oral and overall health (B1) or Observational study of a possible link between oral and overall health (B2);
- Category C: Periodontal intervention to improve oral health;
- Category D: Observational studies in periodontal medicine (emerging trends by period).

The temporal evolution of topics dealing with periodontal medicine and to assess the evolution of current clinical trials related to the field of periodontal medicine (emerging trends by period) were included.

A re-analysis of published systematic reviews was conducted.

The references of included articles were screened to identify additional studies.

The full text of articles was not evaluated.

The classification system and results were discussed in a meeting with experts in periodontal medicine.

The mapping was performed by a resident from the Postgraduate Programme of Periodontology at the Department of Periodontology, Dental Faculty, University of Strasbourg, Strasbourg, France.

The scientific results of this study can be summarised as follows:

- Category A: The most investigated systemic diseases linked to periodontal diseases were cardiovascular disease and diabetes, and overall health. Until now, the most investigated two-way relationship between periodontal diseases and systemic conditions is that between periodontal disease and cardiovascular disease (A). The temporal evolution of topics dealing with periodontal diseases and systemic conditions is presented in a chord diagram (A-D). A-D)

- Category B: The temporal evolution of topics dealing with periodontal diseases and systemic conditions is presented in a chord diagram (A-D).

- Category C: The temporal evolution of topics dealing with periodontal diseases and systemic conditions is presented in a chord diagram (A-D).

- Category D: The temporal evolution of topics dealing with periodontal diseases and systemic conditions is presented in a chord diagram (A-D).

The full text of the original article can be accessed at the following link:

Link to original JCP article: http://onlinelibrary.wiley.com/doi/10.1111/jcpe.12534/full

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An electronic search was conducted in the ICTRP (Clinical Trials Registry Platform). Any registration platform (World Health Organization International Clinical Trials Registry Platform) was included and classified into four categories:

- **Category A**: Periodontal intervention to improve (or prevent) a systemic condition;
- **Category B**: Intervention for a better understanding of periodontal disease and a systemic condition (B2);
- **Category C**: Periodontal disease and a systemic condition (C2);
- **Category D**: Observational studies in periodontal medicine: a systematic mapping research, without systemic assessment.

The proportion of the most investigated systemic diseases linked to periodontal diseases in the 1990s, which has subsequently established a two-way relationship between periodontal diseases and overall health. Until now, the most investigated systemic conditions are cardiovascular disease and diabetes, whereas the two other categories concern systemic diseases related to periodontal medicine and to assess the evolution of current clinical trials related to the field of periodontal medicine in clinical periodontal research.

The aim of this study was to evaluate the topics of clinical trials related to the field of periodontal medicine in clinical periodontal research, without systemic assessment. The database of the ICTRP was cross-examined with the MeSH terms falling under the categories labelled “Diseases” and “Phenomena and Processes”. Chord diagrams were used to illustrate the proportions of the most investigated systemic conditions, whereas the two other categories concern systematic reviews of the available evidence related to periodontal diseases, which deals with periodontal medicine (emerging trends by period). The temporal evolution of topics dealing with periodontal medicine (emerging trends by period) were then linked to the MeSH terms falling under the categories labelled “Diseases” and “Phenomena and Processes”. Chord diagrams were used to illustrate the proportions of the most investigated systemic conditions.

The reference list included 822 RCTs, of which 57 (6.4%) were excluded. Of the remaining 765 RCTs, 57 (7.5%) were classified as Category A, 242 (32%) as Category B, 298 (39%) as Category C, and 128 (16.7%) as Category D. The temporal evolution of topics dealing with periodontal medicine (emerging trends by period) was assessed according to the study’s categories (A to D). The temporal evolution of topics dealing with periodontal medicine (emerging trends by period) was illustrated by two chord diagrams (Figures 1 and 2).

The following year, a two-way association between periodontal disease and cardiovascular disease was revealed via another chord diagram.

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