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Efficacy of adjunctive systemic or local antibiotic therapy in peri-implantitis: a systematic review and meta-analysis of randomized controlled clinical trials

Key words: Peri-implantitis, Dental implant, Oral medicine, Microbiology, Disease management, Meta-analysis

Research Summary

This systematic review and meta-analysis considered the results of randomized controlled clinical trials (RCTs) to evaluate the efficacy of systemic or local antibiotics therapy on peri-implantitis.

Evaluation of outcomes:

- **changes in pocket probing depth (PPD)**
- **survival rate (SR)**
- **changes in clinical attachment level (CAL)**
- **changes in bone level (BL)**

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Innovation points

- **Investigated** the outcomes of implants treated for peri-implantitis by surgical or nonsurgical methods

- **Compared** the results with or without supplementary antibiotics through a meta-analysis

- **Assessed** whether antibiotics demonstrate superior efficacy in treatment for peri-implantitis, compared to other adjuvant approaches

- **Included** randomized controlled clinical trials to acquire higher-quality outcomes

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Innovation points

A series of comprehensive were generated to summarize the efficacy of adjunctive antibiotics therapy in peri-implantitis.

Fig. 3a | **Forest plot of PPD and meta-analyses for the comparison of pocket probing depth changes**

Fig. 3b | **Forest plot of SR and meta-analyses for the comparison of survival rate.**

Fig. 3c | **Forest plot of CAL and meta-analyses for the comparison of clinical attachment level**

Fig. 3d | **Forest plot of BL and meta-analyses for the comparison of bone level**

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