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**Title:** Nanodentistry: The changing face of dentistry

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**Abstract:**
Aim: This review article is an attempt to highlight the possible applications of nanotechnology, the use of nanomaterials in dentistry and provide an early glimpse of nanodental applications alongside proposed applications in the future.

Summary:
The human body comprises molecules; hence, the availability of molecular nanotechnology will permit dramatic progress to address medical problems and will use molecular knowledge to maintain and improve human health at the molecular scale. Nanoscale topology and quantitative biomechanical or biophysical analysis of dental surfaces are of significant interest. Nanodentistry is an emerging field with significant potential to yield new generation of technologically advanced clinical tools and devices for oral healthcare. Nanodentistry will make possible the maintenance of comprehensive oral health by employing nanomaterials, including tissue engineering and nanotissue devices which will allow precisely controlled oral analgesia, dentine replacement therapy, permanent hypersensitivity cure, complete orthodontic realignment etc, all in single office visit, and ultimately, dental nanorobots. An outlook on future “nanodentistry” developments such as saliva exosomes based diagnostics, designing biocompatible, antimicrobial dental implants and personalized dental healthcare is presented.

Conclusion:
Nanotechnology will change dentistry, healthcare, and human life more profoundly than many developments of the past. Molecular technology is destined to become the core technology underlying all of 21st century medicine and dentistry.

nanotechnology, molecule, nanomedicine, nanodentistry, nanorobots

**Presentation:** Poster