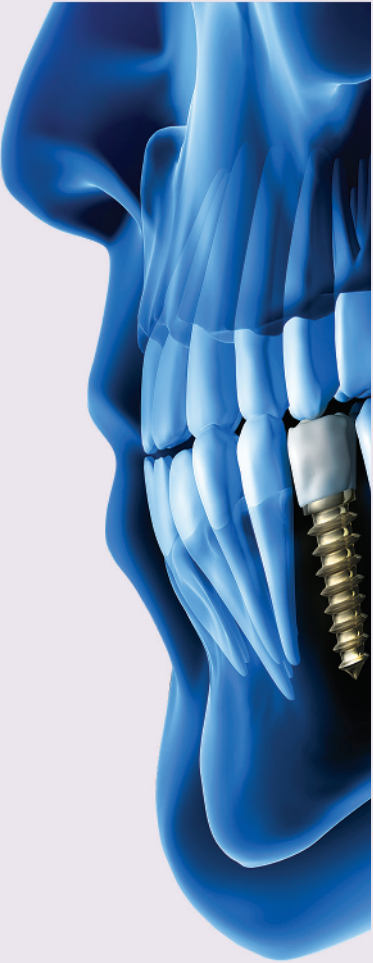


CHAPTER 1

Introduction to periodontology/ periodontics

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Periodontology has been defined as “the scientific study of the periodontium in health and disease.” Periodontology or periodontics is the specialty of dentistry that studies the supporting structures of teeth, as well as diseases and conditions that affect them. The supporting tissues are known as the periodontium (*peri* = around, *odontos* = tooth), which includes the gingiva, alveolar bone, cementum, and the periodontal ligament.

Periodontal diseases, unlike caries, are not a byproduct of modern civilization. The diseases of the periodontium are as old as the recorded history of humankind. Studies in paleopathology indicate that destructive periodontal disease, including the awareness thereof, has accompanied early human beings in diverse cultures. A Sumerian text from 5000 BC describes that Sumerians were apparently suffering from periodontal disease. They practiced oral hygiene, including gingival massage in combination with various herbal medications. Hesy-Re (2686–2613 BC) was an Egyptian scribe who is often called the first “dentist,” and is also credited as being the first man to recognize periodontal disease. Among the ancient Greeks, Hippocrates of Cos (460–377 BC), the father of modern medicine, discussed the function and eruption of the teeth and the etiology of periodontal disease. He believed that inflammation of the gums could be caused by accumulations of “pituita” or calculus, with gingival hemorrhage occurring in cases of persistent splenic maladies. Abu al-Qasim, also known as Albucasis (936–1013 AD), was a Spanish-Arabian physician. He had a clear understanding of the major etiological role of calculus deposits, and he described the techniques of scaling the teeth with the use of a set of instruments that he developed, splinting loose teeth with gold wire, and filing gross occlusal abnormalities. He invented and proposed the use of many elevators and scalers. Ambroise Paré (1509–1590), a Frenchman, was the outstanding surgeon of the Renaissance, and his contributions to dental surgery included gingivectomy for hyperplastic gingival tissues. Anton van Leeuwenhoek (1632–1723) of Delft, Holland, first described oral bacterial flora, and his drawings offered a reasonably good presentation of oral spirochetes and bacilli.

Modern dental practice essentially developed in eighteenth-century Europe, particularly in England and France. During the eighteenth century treatises were published, scientific lectures were given, the first surgeons were trained specifically in dentistry, nonsense remedies were rejected, and many inventions were patented. The nineteenth century is described as a time of advanced science and education, and by the dawn of the twentieth century, the realization that alveolar pyorrhea can be treated led to the recognition of periodontia as a dental specialty. The early twentieth century witnessed the dawn of modern periodontics, with major changes in the diagnosis, etiopathogenesis, classifications, and treatment modalities of periodontal diseases. Various periodontal surgical procedures and resective and regenerative approaches were born.

However, the much-needed information exchange was impeded by inconsistent terminology. Over subsequent decades, periodontists on both sides of the Atlantic met repeatedly to develop countless classification systems that reflected scientific progress as well as clinical utility. As a result of this effort, new nomenclatures were published at arbitrary intervals by professional bodies such as the American Academy of Periodontology (AAP, established in 1914), the American Dental Association, the Arbeitsgemeinschaft für Parodontosen Forschung, and the World Dental Federation, among others. In addition, individual authors also contributed various classifications.

Presently, apart from various regional and national periodontal societies, the AAP and the European Periodontal Federation are two major players representing the discipline of periodontics at an international level. Innovations, nomenclature, advances in the perio-systemic link, and periodontal medicine are progressing with evidence-based science. Also, in 2018 the new *Classification of Periodontal and Peri-Implant Diseases and Conditions* was published.

It is envisaged that one of the most ancient afflictions to humankind will be conquered one day to improve the quality of life of our patients.

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