



Review

TEETH BLEACHING: MECHANISMS, METHODS, AND CLINICAL CONSIDERATIONS

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ABSTRACT

Teeth bleaching, a widely sought cosmetic dental procedure, is primarily aimed at improving the aesthetic appearance of teeth by reducing discoloration and stains. The process of bleaching involves the use of chemical agents, typically hydrogen peroxide or carbamide peroxide, to break down organic compounds in the enamel and dentin layers that cause discoloration. This review explores the mechanisms of action, different bleaching methods (in-office, at-home, and over-the-counter), efficacy, safety concerns, and potential side effects. It also discusses the clinical considerations for patient selection and long-term outcomes.

KEYWORDS: *cosmetic dentistry, oral health, oral medicine, aesthetic medicine*

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Comparative Study

THE ROLE OF LASERS IN DENTISTRY: APPLICATIONS, BENEFITS, AND PROSPECTS

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ABSTRACT

Lasers have emerged as a transformative technology in modern dentistry, offering a wide range of applications that enhance precision, minimize discomfort, and promote faster healing. From soft tissue surgery to hard tissue procedures, lasers are improving clinical outcomes and patient experiences. This paper reviews clinical applications, benefits, limitations, and future trends of lasers in dentistry. It aims to provide an overview of the current state of laser technology in dental practice and its potential for further integration into dental care.

KEYWORDS: *laser dentistry, dental lasers, soft tissue surgery, hard tissue procedures, clinical applications, laser technology, dental treatment*



Narrative Review

THE INTERRELATIONSHIP BETWEEN ORAL HEALTH AND HELICOBACTER PYLORI INFECTION

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ABSTRACT

Helicobacter pylori (*H. pylori*) is a gram-negative bacterium that primarily colonizes the human stomach and has been implicated in the pathogenesis of several gastrointestinal diseases, including peptic ulcers and gastric cancer. Over the past few decades, mounting evidence has suggested a potential link between *H. pylori* and oral health, as the bacterium has been detected in the oral cavity in many individuals. This review explores the relationship between *H. pylori* and oral health, examining the mechanisms by which oral colonization may occur, the potential implications for oral diseases, and the role of the oral microbiome in the persistence and transmission of *H. pylori*. Furthermore, we discuss the clinical implications for diagnosis and treatment and consider whether oral health could be an important factor in the management of *H. pylori*-associated diseases.

KEYWORDS: *oral health, periodontal disease, inflammation, oral infections, helicobacter pylori*

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Evaluation Study

FILLER APPLICATIONS FOR PERIORAL TISSUE AND SMILE: A TWO-WAY RELATIONSHIP

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ABSTRACT

The perioral area, including the lips, nasolabial folds, and surrounding tissues, is a common target for aesthetic procedures aimed at restoring facial volume, reducing wrinkles, and enhancing contours. Dermal fillers have become a widely used tool in non-surgical rejuvenation of perioral tissues. This review examines the various types of fillers used in the perioral region, including hyaluronic acid-based, collagen-based, and synthetic materials, and their clinical outcomes. We will explore the underlying mechanisms of these fillers, their indications, injection techniques, complications, and future trends in filler therapy for perioral rejuvenation.

KEYWORDS: *filler, perioral rejuvenation, cosmetic dentistry, hyaluronic acid*



Evaluation Study

THE IMPACT OF SMOKING ON PERIODONTAL DISEASE: MECHANISMS, CLINICAL IMPLICATIONS, AND MANAGEMENT STRATEGIES

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ABSTRACT

Smoking is a well-established risk factor for periodontal disease, with both epidemiological studies and clinical observations demonstrating a clear association between smoking and increased severity of periodontal conditions. This review aims to provide an overview of the mechanisms through which smoking influences periodontal disease, its clinical implications, and potential management strategies for smokers affected by periodontal conditions. The effects of smoking on the immune response, inflammatory pathways, oral microbiota, tissue repair, and bone metabolism are discussed. Furthermore, we explore how smoking exacerbates periodontal disease progression and complicates treatment outcomes, highlighting the importance of smoking cessation as part of a holistic approach to periodontal therapy. Finally, we consider how periodontal management can be tailored to smokers, with an emphasis on preventive care and therapeutic interventions.

KEYWORDS: *smoking, periodontal disease, inflammation, immune response, tissue repair, microbiota, smoking cessation, periodontal therapy*



Review

EAGLE SYNDROME: A NARRATIVE REVIEW

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ABSTRACT

Eagle syndrome (ES) is a rare medical condition characterized by pain in the neck and throat area, often caused by an elongated styloid process or calcified stylohyoid ligament. When this process becomes elongated or calcified, it can lead to various symptoms and complications, collectively known as ES. The hallmark symptom of ES is persistent pain in the throat, face, and neck. The elongation or calcification of the styloid process or stylohyoid ligament is primarily responsible for ES. The exact cause of this elongation is not always clear, but it can be related to trauma, inflammation, or degenerative changes in the ligament over time. Diagnosing involves a combination of medical history, physical examination, and imaging studies. A thorough examination of the throat and neck, along with a review of the patient's symptoms, helps the healthcare provider assess the likelihood of ES. Imaging studies such as X-rays, CT scans, or ultrasound may be employed to visualize the elongated styloid process or calcified ligament and confirm the diagnosis. Treatment options depend on the severity of symptoms. Conservative measures include pain management with analgesics, anti-inflammatory medications, and physical therapy. The surgical procedure, known as styloidectomy, involves removing or shortening the elongated styloid process to alleviate symptoms. The prognosis for individuals with ES is generally favorable, especially with appropriate treatment.

KEYWORDS: *styloid, ligament, process, pain, calcified*

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Letter to the Editor

MEIGE SYNDROME

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KEYWORDS: *Meige syndrome, cranial dystonia, idiopathic oromandibular dystonia, muscle, contractions, face, jaw*

Dear Editor,

Meige syndrome (MS), also known as cranial dystonia or idiopathic oromandibular dystonia, is a neurological disorder characterized by involuntary muscle contractions affecting the face and jaw (1-35). MS is a form of cranial dystonia characterized by bilateral dystonic spasms of the facial muscles and frequently of other cranial muscles. Its most common and disabling manifestation is blepharospasm, which can render the patient functionally blind. MS has several orbicularis oculi spasms: brief clonic spasms, prolonged dystonic spasms, constant tonic contraction, and "apraxia" of lid opening. In the completed form of the syndrome, blepharospasm is typically associated with lower facial or oromandibular dystonia. Spasms of the neck and limb muscles are generally mild, and action tremors do not uncommonly accompany cranial dystonia.

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Review

FIBROUS DYSPLASIA

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ABSTRACT

Fibrous dysplasia (FD) is a rare bone disorder characterized by the replacement of normal bone with fibrous tissue. This paper aims to provide an in-depth analysis of the manifestations, diagnosis, treatment options, and impact of FD.

KEYWORDS: *dysplasia, hip, bone, cartilage, fracture*

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Review

OSSIFYING PERIOSTITIS OR GARRÉ'S SCLEROSING OSTEOMYELITIS

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ABSTRACT

Ossifying periostitis (OP), also known as Garré's sclerosing osteomyelitis, is a rare inflammatory condition that primarily affects the periosteum. This condition is characterized by the deposition of new bone tissue on the surface of the affected bones, leading to thickening and sclerosis of the periosteum. OP typically occurs in response to chronic low-grade infections, often of dental origin. The condition is more commonly observed in the mandible, particularly in the region of the lower jaw. Clinical manifestations of OP include localized pain, swelling, and tenderness in the affected area. In some cases, patients may experience difficulty in opening the mouth or chewing. Radiographic imaging, such as X-rays, is essential for diagnosing OP, as it reveals the characteristic features of increased bone density and the presence of new bone formation. Treatment generally involves addressing the underlying infection, which may require dental interventions, such as tooth extraction or root canal therapy. Antibiotics may also be prescribed to eliminate the infection. While OP is a rare condition, prompt diagnosis and appropriate treatment are crucial to prevent complications and ensure optimal outcomes for affected individuals.

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Review

CONDENSING OSTEITIS

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ABSTRACT

Condensing osteitis (CO), or periapical osteosclerosis, is a medical condition affecting the jawbones. It is characterized by the abnormal thickening or increased density of the bone near the apex (tip) of a tooth's root. This condition is often discovered incidentally during routine dental X-rays or examinations. The exact cause of CO is not fully understood. Still, it is believed to be associated with a chronic low-grade inflammation in the area, often in response to a long-standing low-level infection in a nearby tooth. As a result, the bone surrounding the tooth becomes denser and may appear as a radiopaque mass on X-rays. Typically, CO does not cause noticeable symptoms, and individuals may remain unaware of its presence. In many cases, it does not require specific treatment unless associated symptoms or complications exist. If an underlying dental infection contributes to the condition, addressing the infection through dental procedures (such as root canal therapy or extraction) may be considered. Dentists and oral healthcare professionals may monitor CO over time to ensure that it does not lead to complications or affect neighboring structures. Regular dental check-ups and X-rays are essential for monitoring the condition and addressing related dental concerns.

KEYWORDS: *osteitis, bone, inflammation, maxilla, mandible*

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Review

RHEUMATOID ARTHRITIS AND SYNOVITIS: AN UPDATE

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ABSTRACT

Rheumatoid arthritis (RA) is a chronic autoimmune disorder characterized by inflammation of the joints, primarily targeting the synovium. In RA, the immune system mistakenly attacks healthy joint tissues, leading to inflammation, pain, swelling, and, eventually, joint damage. This condition can affect multiple joints, often symmetrically, and commonly involves the hands, wrists, and knees. Over time, RA can lead to deformities and reduced joint function. While the exact cause is unknown, a combination of genetic and environmental factors is believed to contribute to the development of RA. Early diagnosis and appropriate management are crucial to mitigate the progression of both conditions and improve the quality of life for affected individuals.

KEYWORDS: *joint, articulation, inflammation, cytokines, synovium*

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