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The increasing population of older subjects with dental care needs will become a major challenge to our society and its care providers. To manage the health care needs of the elderly, a coordination between medical and dental care providers will become necessary. From the dental perspective, it is important to develop skills in the risk assessment of older patients. Such risk assessment of older subjects should take an approach that is holistic and focused on the reduction of the infectious burden and the improvement of self-efficacy.

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Dental caries is one of the most significant health problems facing older adults. More than half of the elderly who are dentate are affected with either coronal or root caries, and caries is the primary cause of tooth loss in this population. New materials and techniques are emerging to help with geriatric preventive and restorative needs, but ongoing vigilance for caries will be required in this population, which is experiencing increased longevity and tooth retention.

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Salivary gland hypofunction and complaints of xerostomia are common in elderly patients, irrespective of their living situation.

Medication use is frequently related to dry mouth symptoms and reductions in salivary flow rates. Patients with reduced salivary flow are at increased risk for caries, oral fungal infections, swallowing problems, and diminished or altered taste. Oral health care providers should institute aggressive preventive measures and recommend palliative care for patients with significant reduction in salivary gland function. The systemic agents pilocarpine and cevimeline may help selected patients. Selective use of fluoride-releasing restorative materials and conservative treatment plans are recommended for this patient group.

Derangement, Osteoarthritis, and Rheumatoid Arthritis of the Temporomandibular Joint: Implications, Diagnosis, and Management

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Jack S. Broussard, Jr

Temporomandibular joint (TMJ) dysfunction is often believed to be a young person's malady. However, geriatric patients also present with clinical findings of TMJ clicking, locking, crepitation, limited opening, and pain. With our aging population and the high prevalence of rheumatic and musculoskeletal diseases in the elderly, it is important to understand the etiopathogenesis, clinical presentation, and management of derangement, rheumatoid arthritis, and osteoarthritis of the TMJ. Although arthritis of the TMJ usually causes only mild-to-moderate dysfunction in older patients, they present challenges related to medication use and comorbidity. This article presents the most recent understanding and therapeutic protocols for patient diagnosis and management.

Orofacial Pain and Sensory Disorders in the Elderly

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Glenn T. Clark, Hajime Minakuchi, and Ana C. Lotaif

Many orofacial pain conditions occur in the elderly. Specifically, this article reviews the prevalence of general and orofacial-related pain in the elderly. The authors also describe and discuss the likely disorders and diseases that produce facial pain and burning pain in the mouth. They do not cover jaw joint pain, oral sores, or ulceration-induced pain, as these conditions are better discussed in the context of arthritis and oral pathologies of the mouth. The authors discuss oral motor disorders, myogenous pain, vascular pain, headaches, trigeminal neuralgia, trigeminal neuropathic disease, postherpetic neuralgia, burning mouth syndrome, and occlusal dysesthesia.

Underserved Elderly Issues in the United States: Burdens of Oral and Medical Health Care

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Veronica A. Greene

The elderly represent approximately 12.4% of the general population (2000 Census), yet their health care expenditure and consumption represent 14% of the total (2003). Although 10% of the elderly

had no medical insurance in 2000, 78% had no dental insurance. Elderly Americans' burden of medical care overuse is worsened by their out-of-pocket expenses for oral health, because this is usually not a covered benefit. In underserved communities, the management of the oral health and dental care needs of older Americans approaches negligence.

Interaction with Other Health Team Members in Caring for Elderly Patients

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Samuel C. Durso

Comprehensive health care of the geriatric patient requires thoughtful communication and coordination of services. Unlike young adults, older patients are likely to be frail, have multiple chronic conditions, and experience disability. Hence they are more likely to depend on others for help and to see a variety of health professionals at different sites. This complexity demands that health care professionals consider their care not in isolation, but as part of a team. They must ensure that other members of the team are kept informed and are consulted as appropriate to ensure safe and effective care. Accomplishing this goal requires being acquainted with the usual care providers, the necessary information for sharing, and the most effective communication methods within the team.

Cognitive Function, Aging, and Ethical Decisions: Recognizing Change

389

Janet A. Yellowitz

As the population ages, dental and other health care providers will be working with more older adults (and their family members) with changing cognitive status than ever before in history. The intent of this article is to review common cognitive changes in older adults that will undoubtedly be seen in dental practices. Knowledge of the common signs and symptoms of age-related cognitive changes provides a basis on which to identify individuals with undiagnosed cognitive changes. This article reviews the relationship between cognitive function, aging, and dementia (specifically, mild cognitive impairment and Alzheimer's disease), the role of the dental team in recognizing these conditions, and issues related to obtaining informed consent from cognitively impaired patients.

Medication Use and Prescribing Considerations for Elderly Patients

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Bradley R. Williams and Jiwon Kim

Older adults consume more medications than any other segment of the population. Increasing lifespan means that more people will live into old age, frequently with disabilities and conditions managed by medications. Age-associated physiologic changes, medication use patterns, and adverse drug effects and interactions place the older adult at high risk for medication-related problems. Older

adults living in institutions, those with complex medical problems, and those who do not adhere to medication regimens are at highest risk for negative health outcomes from medication mishaps. Dentists must be able to identify older adults who are susceptible to adverse drug events and to recognize which medications are most likely to precipitate problems.

Caring for Elderly Long-Term Care Patients: Oral Health-Related Concerns and Issues

429

Michael I. MacEntee

Much work is needed to resolve the many issues of prevention in the complex environment of long-term care facilities and to provide effective curative care for individuals, no matter how frail, who could benefit from comprehensive dental services.

Oral Diagnostics for the Geriatric Populations: Current Status and Future Prospects

445

Yolanda Ann Slaughter and Daniel Malamud

Because it is a noninvasive technique, there is growing interest in replacing blood with oral-based methods of diagnostics. Oral diagnostics may be used for diagnosis and therapeutic drug monitoring of both oral diseases (eg, caries, periodontal disease, oral lesions, oral cancer) and systemic diseases (eg, infectious diseases, including HIV and AIDS, autoimmune diseases, cancer, and endocrine disorders). The authors address both existing techniques and oral-based diagnostics that will be applicable to the aging population in the future. They also highlight those techniques that are uniquely suited to point-of-care applications.

Osteoporosis: Diagnostic Testing, Interpretation, and Correlations with Oral Health—Implications for Dentistry

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Roseann Mulligan and Stephen Sobel

Osteoporosis affects over 10 million Americans, including over 2 million men. Dentistry is in a position to work alongside medicine to assist the population in preventing and coping with this condition. This article provides an overview of osteoporosis, including its causes, assessment, prevention, and treatment. Various pharmacologic agents are reviewed, including bisphosphonates, selective estrogen receptor modulators, calcitonin, anabolic agents, and fluoride. The article also discusses the dentist's role in prevention, risk assessment, diagnosis, nutrition counseling, and evaluating the impact of the disease and its treatment on dental management and treatment planning. As dental implants become more in demand, the prognosis for and potential complications of implant therapy in patients with osteoporosis are a matter of intense interest.

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