

Smokeless Tobacco: Challenges, Products and, Cessation

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Health Risks

The primary carcinogens in smokeless tobacco (ST) are the tobacco-specific N-nitrosamines. The N-nitrosamine content varies by a factor of 18 across brands. The primary target organ for smokeless tobacco-related cancer is the pancreas. Localized oral lesions are common in smokeless tobacco users and there is an increased risk for development of oral cancer. Users are also at increased risk for cancer of the larynx, stomach, and pancreas (1-3). There is some evidence that ST users, particularly younger males, are at increased risk of fatal myocardial infarction (4).



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Abstract

Tobacco companies continue to develop and aggressively market new products for oral use. Most new products are intended to dissolve in the mouth and swallow rather than spit out the juices. These products effectively circumvent smoke-free policies, decrease tobacco cessation efforts, and create individuals who use both smokeless tobacco (ST) and cigarettes. All ST products contain nicotine, carcinogens, and pose multiple health risks. The cancer and health risks associated with ST use extend well beyond the changes in the oral cavity and the risk of oral cancer. Unlike cigarettes, the contents of ST vary widely by brand and product posing difficulty in the use of the available pharmacotherapy for cessation. Although no uniform guidelines exist for the use of pharmacotherapy for smokeless tobacco cessation, research suggests that use of these drugs is effective. The most important motivator for quitting ST cessation remains in the hands of the dentist.

KEY WORDS:

smokeless tobacco, tobacco cessation

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Orthognathic Correction of a Craniofacial Deformity in a Patient with a Mutilated Dentition: A Case Report

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Report of a Case

Our patient is a 24-year-old African-American female referred to the oral and maxillofacial surgery service by her prosthodontist for removal of her remaining carious dentition and to address her skeletal deformity in order to reconstruct a functioning occlusion. Her pre-extraction deformity was consistent with: 1) Anterior skeletal open bite; 2) Maxillary posterior alveolar hyperplasia; 3) Mandibular horizontal hyperplasia; 4) Mutilated dentition; and 5) Unrealized low self-esteem.

The patient was not aware of her deformity or reason as to why her teeth could not come together in a normal bite due to patient's low dental IQ. This patient's evaluation, preoperative planning, and surgical execution shows the close working relationship between surgeon



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Abstract

Orthognathic surgery is routinely performed for patients with dentofacial deformity and has been conducted for more than 100 years (1). Orthognathic Surgery is a functional and esthetic surgery that affects patients self perception. Patients have noted an improvement in their facial appearance after orthognathic surgery that was associated with improvement in psychosocial adjustments (2). When the decision to move both the maxilla and the mandible is made, there are numerous variables to be considered. Among these variables are the stability of double jaw surgery, improving the masticatory function of the patient and lastly, the esthetic result.

Past studies have also looked at patient concerns including temporomandibular joint symptoms, speech difficulties and problems with mastication. In one study by Rivera and colleagues who studied 143 patients pre-operatively found 71 percent with esthetic concerns (3), 47 percent had functional concerns and 28 percent had temporomandibular joint concerns.

Traditional treatment planning for two-jaw surgery uses the condyle as the point of rotation with the mandibular occlusal plane being used as a template for setting the maxillary teeth (4). This approach, which allows clockwise and counterclockwise rotation of the mandible gives stable skeletal results. Recent studies appear to indicate that long term stability is achieved mainly when rigid fixation is employed.

Orthognathic surgery is only one part of the process to correct a dentofacial deformity. The process starts with the initial diagnosis, followed by a treatment plan and then patient consent. Treatment generally begins with a dental assessment to correct decay, followed by orthodontic decompensation in preparation for surgical intervention. Orthognathic surgery is followed by postoperative orthodontia to maximize the occlusal relationship. This process underscores the skill and detailed communication between orthodontist and oral surgeon, and emphasizes the crucial aspect of team approach in such complex surgical cases. We present here a report on a patient who had a mutilated dentition both in the maxilla and mandible along with a craniofacial deformity.

KEY WORDS: Orthognathic surgery
mandibular prognathism, maxillary hypoplasia,
gunning splints, apertognathia, meth mouth, cranial base of jaw anomaly.
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