Obesity Linked to Periodontal Disease

Dr. Mohammad S. Al-Zahrani of Case Western's Centers for Health Promotion and Research investigated the link between obesity and periodontal disease in young adults. Study subjects had periodontal exams and were categorized into groups according to their waist circumference and body mass index. Results showed that among people between the ages of 18 and 34, obese individuals had a 76% higher prevalence of periodontal disease compared to normal weight individuals. Today's young adults drink less milk and more soft drinks and non-citrus juices than in years past, which decreases their recommended daily allowance of vitamin C and calcium.

Can Milk Teeth Diagnose Asthma?

Preliminary analysis of umbilical cord samples seem to suggest a possible connection between pre-born infants' exposure to the minerals iron and selenium and a subsequent risk of wheezing. By studying the milk teeth of children with and without a history of asthma, researchers can check pre-birth exposure to the minerals.

A child's too top two front teeth begin to develop in the womb, where tooth enamel absorbs trace elements and minerals. This permanent record of exposure is another clue suggesting that the nature of lung and immune development in utero can greatly influence whether or not wheezing and asthma will be a part of this child's future. This study is based at the University of Bristol.

Dentinogenesis Imperfecta

Scientists at the National Institute of Dental and Craniofacial Research (NIDCR) have created a mouse model with tooth defects similar to those seen in people with dentinogenesis imperfecta (DGI). The model will allow scientists to learn more about how the hereditary disorder affects and provides insights for developing treatments. Dentinogenesis imperfecta is classified into three subtypes: The teeth can be bluish or browning with a somewhat translucent appearance. Most of those severely affected with DGI-III are candidates for dental treatment.

Immediate Loading of Implants

Given the variety of results obtained, there is understandably a continued interest in the immediate loading and restoration of implants placed into the jaw. Dr. Petrucco looks at this topic in connection with various elevation procedures, a combination which has limited reports about it.

Internal vs. External Marketing

Tyson Steele explains the four components of marketing and presents a sound case for internal marketing as the better option for dental practices. Take some time to learn how to increase your profits without breaking your budget on expensive external marketing options.

Periodontal Probe

The periodontal probe is one of the dental hygienist’s most important instruments. It is used to collect several different kinds of data. These data are vital to ascertain the individual’s therapy requirements or success. This article aims to guide dentists towards the correct periodontal probe.

Gain the industry’s impression of the latest dental exhibition and conference. Interview with company representatives reveal their assessment of dental trends in the region and information about products featured at the exhibition.

Temporarily Replacing Congenitally Missing Maxillary Lateral Incisors in Teenagers Using Transitional Implants

G. William Keller, U.S.A.

It is a common dilemma: A teenager who recently completed orthodontic therapy with congenitally missing lateral incisors now requires some type of transitional appliance to replace those missing teeth. Up until this point in time, few restorative options have been available.

As a transition, the removable appliance is the first choice amongst orthodontists. Not only does it replace the missing teeth, but it also functions as an orthodontic retainer. Orthodontic retention is very important post orthodontic therapy for at least 9–12 months in which the patient wears the retainer 24 hours a day to allow for proper bone remodeling.

The inconvenience of this appliance is obvious, especially when eating and talking. The social embarrassment of showing “no teeth” when eating in front of their friends can be quite disturbing.

Bonded Retainer

The Maryland Bridge satisfies the dilemma of a removable prosthesis. However, we all know its disadvantages, especially if this is not going to be the final restoration. The bonded retainer is more difficult to maintain because of it fixed attachment to the adjacent teeth and tends to debond with erosive forces. In order to create a more “permanent” appliance, undercut or grooves may need to be placed on the lingual of the adjacent teeth.

Transitional Implants

A unique approach involves the use of transitional implants that are normally utilized to support partially or fully edentulous provisional restorations, and have been widely discussed and documented in the literature. Using these fixtures to retain a provisional restoration in a single tooth gap created by congenitally missing laterals in a teenager has not yet been published. This article describes such a process.

Treatment Plan

The significant success rate of osseointegrated implants is well documented. The recommended minimum age for a patient considering such treatment is somewhat vague. If we use accepted criteria regarding implant placement in the growing child, then a number of young patients who have congenitally missing teeth, specifically lateral incisors, will need to wait 3.5 years before having permanent replacements; the temporary alternatives have been limited with numerous disadvantages.

The transitional implant work-up is similar to that of permanent implants. It is comprised of a thorough medical/dental diagnosis and history with peridontal evaluation, radiographs and models. The treatment plan coordinates the surgical, restorative and laboratory procedures so that the provisional restoration can be placed within 24 hours after MTI placement [Modular Transational Implant, Denta- tus, USA, (800) 323–336].

In most cases, the patient has completed orthodontic therapy, and is wearing a removable orthodontic retainer. It is important that the orthodontist has been completed and proper intra-radicular distance of the adjacent teeth is adequate, not only for placement of the transitional implant, but also the permanent fixture. The orthodontist will need to modify the existing retainer or make a new one after the provisional teeth are in place.

Surgery

Before beginning the surgical procedure, the lengths of the MTIs are selected [14, 17, or 21 mm], as well as the MTI profile drills and ancillary items, which must be sterilized before use (Fig.4).

Once adequate anesthesia has been achieved, the teeth are cleaned to the bone level. A surgical flap is created and the osseous crest, you must account for this when drilling the osteotomy.

Once the MTI fixture is placed to the pre-determined depth, ensure the abutment fixture is in a mesial/distal direction to accommodate the restorative component. The fixture can then be bent to the ideal position for restorative purposes.

Technique

When the surgeon is satisfied with the position of the MTI in all three dimensions, the patient undergoes one of two options: 1. Placement of an impression coping seated completely into the slots of the MTI fixture, so that a final impression can be taken. This laboratory-fabricated component of marketing and presents a sound case for internal marketing as the better option for dental practices. Take some time to learn how to increase your profits without breaking your budget on expensive external marketing options.

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Get the industry’s impression of the latest dental exhibition and conference. Interview with company representatives reveal their assessment of dental trends in the region and information about products featured at the exhibition.
The prospect of eliminating a removable orthodontic appliance for a young teenager is incredibly exciting.

The patient, with the MTI transfer copings in place, arrives at the restorative dentist’s office ready for the impression. The restorative dentist takes a rubber base or polyvinyl impression of the maxillary arch to pick up the transfer copings. An opposing model and bite registration is obtained, along with a tooth shade.

Within 24 hours, a laboratory provisional is fabricated (Figs. 10, 12, 14) using the singular modular coping supplied by the company (Figs. 11, 12). During this short waiting period, soft rubber protective caps are placed over the MTI implants to protect the lip and tongue from any undue trauma (Fig. 13).

It is important to make sure the laboratory designs the provisional crown with broad, tight interproximal contacts to allow for resistance to off-angled forces. The patient is instructed on appropriate oral hygiene procedures and evaluated. A new orthodontic retainer is fabricated or the existing one modified. Final radiographs are taken.

Summary

I have presented a unique approach to temporarily restoring edentulous sites in teenagers resulting from congenitally missing maxillary laterals. The success of this technique depends on the patient’s cooperation and commitment. Clinical follow-up will be required for up to 2 years.

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Literature