**SOBOR-BEVOR**

**One-day course: June 9 2022**

**Practical Considerations in Orthodontics:**

**Early and Multidisciplinary Treatments**

***by Dr Roy Sabri***

**Titles and abstracts**

**1- Class III in growing patients: treatment timing and methods**

Optimal treatment timing and the methods for correction of a developing Class III malocclusion are still one of the most controversial topics in orthodontics. Treatment alternatives are:1) orthopedics or growth modification with the reverse pull headgear or facemask, functional appliances or the chin cup, (2) orthodontic camouflage by dental compensations, (3) orthognathic surgery, normally at the end of growth. Guidelines on timing and modality of orthodontic, orthopedic and orthognathic treatment will be presented. Specifically, the following questions will be addressed: what age Class III treatment should be initiated and how; when to treat orthopedically, when to compensate dentally, when to monitor and when to delay treatment for surgery? The clinical use of the facemask, treatment response on the maxilla, mandible and teeth and the chances of relapse will be illustrated through clinical cases.

Reference: Sabri R. Non-extraction treatment of a skeletal Class III adolescent girl with expansion and face mask: Long-term stability. Am J Orthod Dentofacial Orthop 2015; 147: 252-63.

**2- Class II division 1 malocclusions: in one or two phases?**

Timing of orthodontic treatment to achieve an optimal outcome in the treatment of Class II, Division 1 malocclusions is a challenging issue to the clinician. Despite considerable available data, controversies still revolve around which malocclusions should be treated in the mixed dentition (8-10 years) in a 1st phase treatment followed by a 2nd phase in the permanent dentition, and in which conditions the malocclusion should be corrected in the early permanent dentition. Clinicians who advocate early treatment list the following advantages: better orthopedic effects, greater cooperation, shorter 2nd phase treatment time, less need for extraction, prevention of trauma to incisors, psychosocial advantage. Focus in this lecture will be on the evidence for and against these observations. Treatment reports will help illustrate how to better select Class II; Division 1 patients most likely to benefit from early treatment. Good versus bad responders will be identified regardless of a one or two-phase approach, helping draw reasonable guidelines for clinical practice.

Reference: Sabri R. Early treatment of a Class II Division 1 retruded mandible: Long-term stability. Journal of the World Federation of Orthodontists 2012; 1: e19-e26.

**3**- **Eruptive abnormalities: recognize and intercept**

Orthodontics has been traditionally associated with the treatment of the adolescent patient. Eruptive abnormalities occur mostly during the mixed dentition stage of development of the dentition and their early recognition can prevent or reduce the severity of a developing malocclusion. Appropriate and timely management of conditions such as supernumerary and missing teeth, anomalies of tooth size and shape, abnormal labial frenum, premature loss and prolonged retention of deciduous teeth, delayed eruption of permanent teeth, ectopic eruption and transposition, traumatic displacement of tooth buds will be addressed.

References:

-Sabri R. Les accidents d’éruption des incisives centrales supérieures dus à des dents surnuméraires: Diagnostic précoce et traitement. Rev Orthop Dento Faciale 1992;2:319-327.

-Sabri R. Complications orthodontiques des traumatismes de l’incisive centrale supérieure temporaire et leur traitement. J Odonto-Stomatol Pediatr 1993;3:23-32.

**4-Management of over-retained deciduous molars with and without permanent successors**

The objective of this lecture is to describe the various clinical situations of prolonged retention of deciduous molars. Management of orthodontic space closure in the absence of permanent successors and treatment alternatives in space opening, including retaining the deciduous molars, are described. Periodic monitoring, composite buildups, and indications and timing of extraction of infraoccluded and ankylosed deciduous molars with and without permanent successors are reviewed.

Reference: Sabri R. Management of over-retained mandibular deciduous second molars with and without permanent successors. World J Orthod 2008; 9:209-220.

**5-Management of missing maxillary lateral incisors**

Congenitally missing maxillary lateral incisors create a major esthetic problem due to their strategic position in the smile. The two treatment approaches commonly taken are creating adequate space to prosthetically replace the missing lateral incisors or closing the spaces and replacing the missing lateral incisors by the canines. This lecture will discuss indications, advantages, disadvantages and problems encountered in cases of space opening and space closure for missing laterals. The amount of space to be created, the preparation and the timing for implant placement, the bone volume, the implant size and prosthetic considerations will also be discussed. The methods for reshaping canines and building them up to simulate lateral incisors in orthodontic space closure, and positioning the canines and first premolars so that they resemble to the teeth they are replacing will be described.

References:

-Sabri R. Management of missing maxillary lateral incisors. J Am Dent Assoc 1999;130(1):80-84.

-Sabri R, AbouJaoude N. Agénésie des incisives latérales maxillaires : approche orthodontique et implantaire. Orthod.Fr 2008;79:283-293.

**6-Management for old and recent first permanent molar extractions**

First permanent molars are the most caries-prone teeth in the mouth. Six clinical situations of missing 1st molars are commonly encountered in daily practice: (1) Old non-compensated extractions with mesio-lingual tipping of the second and third molars and overeruption of the antagonist 1st molar. (2) Recent extractions of hopeless 1st molars. (3) “Strategic” extraction whenever a compromised, even though salvable 1st molar is extracted instead of a sound premolar. (4) Impacted 1st molars. (5) Early extraction of severely decayed 1st molars in young children in order to favor a mesial eruption of the 2nd molar in place of the extracted 1st molar. (6) Extensive mouth rehabilitation where implants are used as temporary orthodontic anchors before their final restoration post-orthodontics. This lecture will show the various orthodontic and restorative options with 1st molars that are already extracted or have to be extracted.

Reference: Sabri R. Multidisciplinary management of permanent first molar extractions. Am J Orthod Dentofacial Orthop 2021; 159:682-92.

**7-The eight components of a balanced smile**

Dentists are constantly looking for guidelines as to what the perfect smile should be. A pleasing smile directly depends on the relations between teeth and lips, their integration in a harmonious facial composition, and the quality of the dental and gingival elements it contains. This lecture will describe eight components for a balanced smile as guides to smile analysis and treatment. Clinical situations in which one or more components of the smile are affected will be shown. It will also describe how orthodontics alone or in combination with other disciplines can enhance the various components of the smile.

Reference: Sabri R. The eight components of a balanced smile. J Clin Orthod 2005;39:155-167.

**8- The Orthodontic - Orthognathic Surgery Interface**

An increasing number of patients are seeking treatment today to improve their appearance. While adult orthodontics alone can improve dental esthetics, it could fail to fully address facial and smile esthetics. This lecture will describe the possibilities of orthognathic surgery today, how combined with orthodontics it can be used similar to plastic surgery to better target the face and smile, and how additional adjunct procedures can enhance the overall outcome.

Reference: Sabri R. Orthodontic objectives in orthognathic surgery: state of the art today. World J Orthod 2006; 7: 177-191.