

IS FUNCTION INDEPENDENT OF AESTHETICS ?

Prof. d-r Ana Minovska



HOW THIS TWO TYPES OF VALUES ARE RELATED TO EACH OTHER.

IS FUNCTION INDEPENDENT OF AESTHETICS

DAWSON¹ HAS STATED THAT WITH REGARD TO TREATMENT PLANNING FOR OCCLUSAL PROBLEMS, RESTORATIVE PROCEDURES SHOULD NOT BE UNDERTAKEN UNLESS THE END RESULT CAN BE VISUALIZED.



Patient with failing maxillary reconstruction and extensive mandibular tooth wear.

MILLER² HAS ALSO REAFFIRMED THE INTERDEPENDENCE OF THE “ESTHETIC ZONE” THE ANTERIOR TEETH, WITH THE REST OF THE MASTICATORY SYSTEM

SUCCESSFUL ESTHETIC TREATMENT CANNOT BE ACCOMPLISHED WITHOUT CONSIDERATION AND MODIFICATION OF VARIOUS ELEMENTS OF THE OCCLUSION.

1.. Dawson PK. Solving occlusal problems through programmed treatment planning. In: Evaluation, Diagnosis and Treatment of Occlusal Problems. St Louis: Mosby, 1974:387.

2. Miller L. Symbiosis of esthetics and occlusion: Thoughts and opinions of a master of esthetic dentistry. J Esthet Dent 1999; 11:155-165.

Therefore, it is imperative that a consistent and systematic approach to planning treatment for the patient be used.

WHAT STEPS SHOULD BE UNDERTAKEN ?

Often the dentist is faced with conflicting demands between function and esthetics.

The first step in preparing for any major change is an esthetic evaluation.

Smile and Dental Analysis

The smile analysis comprises details of the lips and the gums as a unit. The dental analysis provides insight into characterization and individuality of the teeth.

OPTIMAL AESTHETICS?

A SYSTEMATIC APPROACH TO SMILE ANALYSIS, USING SMILE DESIGN PRINCIPLES,

3 PRIMARY FACTORS AFFECTING A SMILE

- **LIP FRAMEWORK**
DENTO-LABIAL ANALYSIS
- **TEETH**
DENTAL ANALYSIS
- **GINGIVAL CONTOUR**
DENTO-GINGIVAL ANALYSIS

ONCE THE ESTHETIC TREATMENT PLAN HAS BEEN DETERMINED, THEN THE TOOTH SIZE, SHAPE, AND POSITION ARE EVALUATED IN TERMS OF WHETHER THEY PERMIT THE IDEAL FUNCTIONAL OUTCOME.

At this point the dentist decides whether the centrals have been lengthened sufficiently and whether that would create a deep bite that might compromise occlusal function.

Determination of whether, and how, to adjust the occlusion to obtain ideal function would be the next important step. That might include increasing vertical dimension or, rarely, decreasing it.

STEPS TO INTEGRATE FUNCTION AND ESTHETICS

OCCLUSAL PRINCIPLES

THERE ARE SEVERAL GENERALLY ACCEPTED CRITERIA FOR SUCCESSFUL PHYSIOLOGIC OCCLUSION.¹

1. Stable, simultaneous bilateral maximal intercuspation of the teeth with the mandible in the centric relation or terminal hinge position; no interferences to closure between maximal intercuspation and the terminal hinge position of the mandible.

2. Freedom of mandibular movement in lateral and protrusive movement to and from the maximal intercuspation position, without posterior or anterior interferences.

3. Occlusal forces are distributed as widely as possible, with attempts made to minimize horizontal forces on both posterior and anterior teeth.

1. Dawson PK. Criteria for optimum occlusion. In: Evaluation, Diagnosis and Treatment of Occlusal Problems. St Louis: Mosby, 1974:293.

CASE REPORT



A 30-year-old male patient was seen for a comprehensive evaluation. His medical history was non-contributory. Past dental treatment was mostly routine.



**STAGE III
TREATMENT**

**In office teeth
whitening before
placement of eight
maxillary
NO PREP VENEERS
LUMINEERS®
on teeth # 14
through #24**

CONCLUSIONS'

TO RESTORE FUNCTION AND ESTHETIC , FOLLOWING KEY POINTS MUST BE CONSIDER TO MAKE THE CASE SUCCESSFUL.

- **SOLID UNDERSTANDING IN ESTHETIC RESTORATIVE PROCEDURES.**
- **SOLID UNDERSTANDING IN OCCLUSION AND TMJ.**
THE FUNCTION OF BITE IS CRUCIAL TO THE FUNCTIONING OF JAW MUSCLES AND LONG TERM COMFORT.
- **EACH PATIENT'S CONCERNS AND CONDITIONS ARE UNIQUE.**