LINGUALIZED OCCLUSION:
A THERAPUTIC PARADIGM

Abstract:
The purpose of this review is to explain the emerging popular concepts of Lingualized occlusion. It is contemplated that the present effort will give a new vision to the subject, especially in mechanics for the arrangement of teeth for prosthodontic rehabilitation. This brief review discusses the merits of lingualized occlusal scheme as a therapeutic paradigm in prosthodontic rehabilitation of partial and complete edentulous cases. Lingualized occlusion is a valuable concept because it blends many of the ideals of the anatomy and mechanical schools of thought. It retains many advantages of anatomic and nonanatomic occlusions. It is especially indicated for implant retained prosthesis where axial loading is of paramount importance.

In addition to being a valuable clinical adjunct, lingualized occlusion also has a great application in undergraduate dental education. Due to time constraints dental students seldom have time to master the intricacies of a conventional fully balanced anatomic occlusion, hence often abandon it. Also when in practice one turns to easier and simpler techniques.

Keywords: Lingualized occlusion, Therapeutic paradigm

Introduction
The search for an ideal artificial tooth arrangement that maximized denture stability, comfort, aesthetics and function have occupied the denture literature for many years. Of the many occlusal schemes that have been presented to the dental profession, Lingualized occlusion has emerged as one of the most popular schemes.

Occlusion is defined as “the static relationship between the incisive or masticatory surfaces of maxillary and mandibular teeth or analogues of teeth” (GPT 1994). Lingualized occlusion is identified by the occlusal contact of the maxillary lingual cusps of the posterior teeth initially with the occlusal surfaces and marginal ridges of the mandibular teeth in maximum intercuspation and the continuous contacts of the anterior teeth as they pass over one another (GPT 1994).

The concept of Lingualized occlusion is very important because of the large number of different patient situations for which it may be used. The term itself has been used in many ways. E.g, encompassing balance, non balance, linear, functional relation and organic occlusions.

Review Of Literature
Dr Alfred Gysi (1927) introduced the concept of Lingualized occlusion. He suggested “Gysi Cross bite “posterior teeth. The maxillary buccal cusp was almost eliminated, resulting in one prominent lingual cusp that occluded into lower anatomic tooth. The occlusal surfaces of all the posterior teeth were reduced. Gysi also described a “mortar and pestle “ action of this occlusal scheme.

Discussion
Advantages of Lingualized occlusion:
1. Lingualized occlusion may be developed using anatomic, semi anatomic or zero degree teeth.
2. In Lingualized occlusion during centric position the maxillary lingual cusps occlude in the central fossa of the mandibular tooth cusp. The maxillary buccal cusps are set up and off the plane to allow freedom in eccentric movements.
3. In Protrusive position, the maxillary cusps are set against mandibular cusped teeth arranged on a curve to provide eccentric balance. This type of occlusal scheme is appropriate for patients requiring additional parafunctional stability of a balanced occlusion.
4. In Myerson Lingualized Integration concept only maxillary palatal cusp must keep contact in the central fossa of the mandibular teeth. Cusps initially do not keep contact, causing the teeth to act as a pylon system, during mastication.
5. Molars and premolars arranged in Lingualized occlusion provide maximum intercuspation, an absence of deflective occlusal contacts, adequate cusp height for selective occlusal reshaping and a natural and pleasing appearance.
6. In lingualized occlusal concept the primary difference is in high palatal/lingual cusps of maxillary posterior teeth. The mandibular teeth have decreased cusp heights and multiple spillways to assist in mastication.

In lingualized occlusal concept three posterior teeth are...
Comparision of Lingualized and Balanced Occlusion :

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<th>LINGUALIZED OCCLUSION</th>
<th>BALANCED OCCLUSION</th>
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<td>1. Most of the advantages attributed to both the anatomic and non anatomic are retained.</td>
<td>1. The contact varies in frequency with different foods and different persons. If this contact is interrupting and deflective, and not bilateral, the denture base will not be stable. Hence, bilateral balanced contacts during the terminal arc of closure help to seat the denture in a stable position.</td>
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<td>2. Cusp form is more natural in appearance Compared to both the anatomic and non anatomic forms.</td>
<td>2. It is important during activities such as swallowing saliva, closing to reseat the dentures, and the bruxing of teeth during times of stress.</td>
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<td>3. Good penetration of food bolus is possible.</td>
<td>3. Patients with a balanced design do not upset the normal static, stable and retentive qualities of their dentures.</td>
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<td>4. The forces on the mandibular alveolar ridge are situated more centrally at the top, which increases the stability of the lower denture.</td>
<td>4. In bilateral balance the bases are stable during bruxing activity and they are tight when the patient spare the teeth.</td>
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<td>5. A “Cross bite” can be avoided in almost all cases.</td>
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<td>6. The facial muscles are well supported by the maxillary molars, which increases the aesthetic value even more.</td>
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Summary and Conclusion:
Lingualized occlusion is identified by the occlusal contacts of the maxillary lingual / palatal cusps of the posterior teeth initially with the occlusal surfaces and marginal ridge of the mandibular teeth in maximum intercuspation and the continuous contacts of anterior teeth as they pass over one another. (GPT1994). Lingualized occlusion provides a useful combination of several occlusal concepts. Many advantages of anatomic and non-anatomic occlusions are retained. Adjustments to compensate for minor changes in vertical and centric relation is readily accomplished. Although not ideal ingualized occlusion is a valuable concept because it is adaptable to many different clinical situations. It blends many of the ideals of the anatomy and mechanical schools of thought.

References:
1. Becker C. M. Lingualized occlusion for removable prosthodontics