

GENERAL GUIDELINES

Do not steepen incisal guidance. Four million years of evolution shows that it flattens with aging to accommodate to other physical changes.

No straight lingual concavities-the envelope of function is always round at the top.

No flat lingual surfaces on restorations.

Do not orthodontically move anterior teeth posteriorly into the envelope of function.

Try to make centric stops on anteriors where possible - always on cuspids.

Don't remove centric stops when equilibrating lateral interferences.

Therefore - Must add to fossae in almost all cases. Old amalgams are almost always too low.

Never deepen a fossa without coordinating with the occlusal determinants:

1. Condyle paths of movement against eminences (gnathology);
2. Anterior paths of disclusion - R&L and protrusive (a physiological envelope of function determinant - not from condyle paths on an articulator).

Eliminate any lateral contact either side of centric in posterior teeth.

Don't immediately try for C.R. Patient will give you muscle and posture guided centric relation after lateral and protrusive interferences are removed (if you did not inadvertently close the V.D. remember to restore fossas first). Occlusal dysfunctions have been initiated by early aggressive attempts to obtain a repeatable condyle position.

In other words, eliminate tooth structure occupying space belonging to muscles before trying to find centric. Otherwise, you will be trying to overcome muscular avoidance.

Point to keep in mind: Many mandibles want to slowly function in a more anterior position as time and the aging process go on (Hilming & Pederson etc., etc.) Part of every recall exam is to determine if they need more lateral or protrusive freedom. It may continue to change as long as they live - especially with respiratory problems or postural degeneration. A part of every recall exam. Millions of years of human occlusions show this.

Note: Adjusting occlusions to allow for this will be impossible if you have made widely-separated tripod contacts on posterior teeth. The deeper the fossa, the greater the problem as the lower cusps function more anteriorly, away from one contact and one to the edge of an inclined plane. Same for upper cusps as they function posteriorly out of lower fossae.

Place cusp in positions where they can miss their opponents in all excursions, (the essence of gnathology).

When in doubt (when working without jaw recordings) keep curve of Spee shallow and plane of occlusion low at posterior end especially in class III and class II without cuspids in contact.

Always re-establish upper lingual and lower buccal cusp in centric contact against their opposing fossae with no contact in lateral excursions.

Ask questions regarding head, neck and ear problems and look for muscle dysfunctions before making restorations which could conceivably affect the occlusion - if changing any cusp and especially any fossa.

Solve occlusal problems in the temporaries before making final restorations and use temporaries as the guide.

Look for evidence of tooth (porcelain, gold, etc.) structure that may be occupying space which belongs to the muscles on every recall.

- saves bone and gingival height
- saves porcelain breakage
- reduces sensitivity and/ or mobility
- stops progressive degeneration into future T.M.D. problems arising from muscular avoidance of noxious tooth contacts
- these slight adjustments are easy and rapid

Look up and down—you are fitting a pair of multi-cusped teeth together under functional biologic and probably changing demands with time.

- each pair of teeth is a joint
- which is a part of a 16-unit joint
- which will become the largest harmoniously functioning joint in the head, but only after you have made it into one functioning joint from a collection of alternately firing and discordant sensory receptors which required adaptive response by head, neck and postural structures - or by periodontal structures.

The greater the number of non-deflective contacts in the occlusion, the greater the neurologic validity of the dental joint to dictate and control mandibular position without requiring the adaptive positions of other structures in the postural system.

Common Anatomy Mistakes:

- Placement of middle buccal cusp and its triangular ridge of lower molar across the path of upper lingual cusp travel in balancing excursion of the upper molar.
- Placement of upper transverse ridge across path of lower middle buccal cusp in balancing excursion in molar occlusion.
- "Pot Hole" fossae - large and deep; unadjustable if mandibular function changes. Tripod contacts are unnecessary and un-adjustable.
- Placement of lower bicuspid buccal cusp in distal fossa or upper bicuspid, unless absolutely necessary.