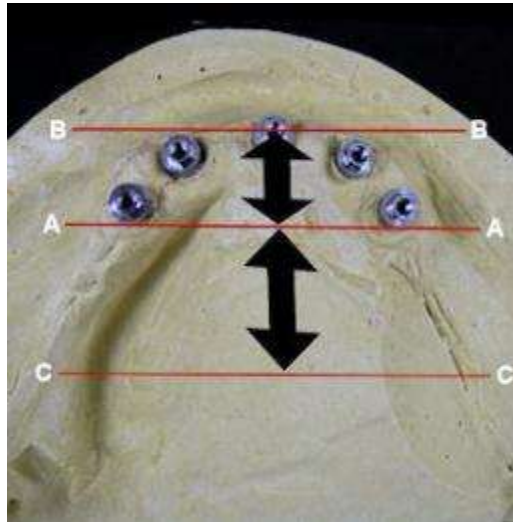


Anterior/Posterior Spread

Draw a line "A" through the distal aspect of the most posterior implants and draw a second line "B" through the center of the most anterior implant, parallel to line "A". Measure the distance between line "A" and line "B". Multiply the anteroposterior spread distance by one and a half or two times. Draw a third line "C" connecting the measurement points.

1.5 to 2.5 the distance from A to B but depends on different factors.

Information and image on this slide courtesy of: www.genieoss.com



AP Spread: Prosthetic and Implant considerations

1. Patients bite force
2. The opposing arch
3. The angulation of the distal implants
4. The restorative space allowing for material height and width
5. The width and length of the implants especially distal ones
6. The amount of material around the distal implant.
7. Screw hole size
8. Lingual Implant placement (Poss multi unitabutments to re direct)

Goal is one tooth distal.

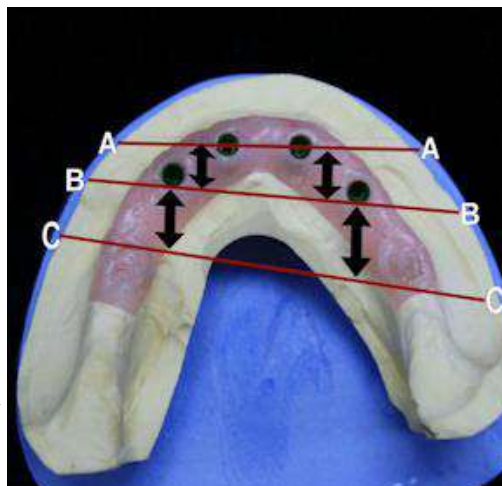


Image courtesy of www.genieoss.com

Clinical steps to achieve maximum height of zirconia at distal implant junction

At surgery reduce as much bone as possible while maintaining bone for the longest implant possible

Open the vertical dimension if possible

Reduce tissue height if excess tissue is there

Reduce the opposing arch height if possible



Three-dimensional finite element stress analysis of a cantilever fixed partial denture.

Awadalla HA, Azarbal M, Ismail YH, el-Ibiari W.

Department of Prosthodontics, University of Pittsburgh, School of Dental Medicine, Pa.

Abstract

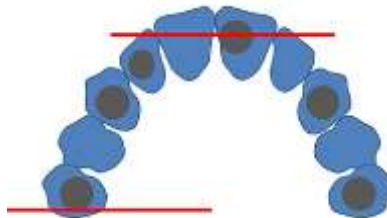
A three-dimensional mathematical model was generated, representing a three-unit cantilever fixed partial denture and its supporting mandibular structures. First and second premolars were used as abutments with one posterior cantilever pontic. A 5 lb vertical load was applied to the pontic. Vertical and horizontal stresses were analyzed by means of a three-dimensional finite element stress analysis technique. The results showed that a cantilever pontic creates considerable compressive stress on the abutment nearest to the pontic and produces tensile stress on the abutment farthest from the pontic.

PMID: 1501187 [PubMed - indexed for MEDLINE]

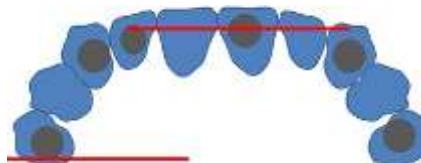
Lingual placement allows more bulk of zirconia



Tapered arch form



Square arch form



Want maximum height and width around distal implant area for cantilever.

