TOOTH SELECTION & ARRANGEMENT IN REMOVABLE PARTIAL DENTURE

DR ZURYATI AB GHANI

BDS (WALES), Grad Dip Clin Dent (Adelaide), Doctor in Clinical Dentistry (prosthodontics), Adelaide, FRACDS (Australia).

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Teeth selection

- Dentists’ responsibility – should not assign the task to the technician
- Categories
  - Shape or mould
  - Shade
- Guide
  - Pre-extraction record
    - Photographs
      - Natural teeth or dentures admired by them
    - Casts
  - Patients’ wishes (spacing or crowding)
Teeth selection

- **Guide**
  - Measurement from canine to canine
  - Inverted shape of the face
  - Shape of the edentulous maxillary arch
    - Both have no scientific credence

- **Posterior teeth**
  - Teeth with cusps
  - Teeth without cusps
  - Hybrid teeth
Color and shade

- Follow existing dentition
- Careful and deliberate consultation with patients
- Considerations
  - Age (teeth tend to become darker with age although this is not always absolute)
  - Patient preference
  - Skin color (usually darker skin whiter teeth)
  - Canine teeth slightly darker than incisors
• Dentists’ responsibility
• Photographs or favored dentures if possible
• Select lower to complement the upper
• Fulfill esthetic and functional requirements
• Good practice to produce study models prior to extracting teeth
# Materials for artificial posterior teeth

<table>
<thead>
<tr>
<th></th>
<th>Acrylic</th>
<th>Porcelain</th>
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<tbody>
<tr>
<td>-Less abrasive to</td>
<td></td>
<td>Abrasive</td>
</tr>
<tr>
<td>opposing tooth</td>
<td></td>
<td>Useful if opposing tooth has porcelain restoration</td>
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<tr>
<td>-Stain</td>
<td></td>
<td>Stain resistance</td>
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<tr>
<td>-Less aesthetic</td>
<td></td>
<td>More aesthetic</td>
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<tr>
<td>-Lighter</td>
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<td>Heavier</td>
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OCCLUSION

- Static occlusion
  i) Centric relation
  ii) Centric occlusion
- Dynamic occlusion
  i) Protrusion
  ii) Lateral excursion - canine guidance - group function
Occlusion in natural dentition

- Posterior disclusion on protrusion
- Disclusion on non working side during lateral movement
Occlusion in full denture patient

- Balanced articulation

Continuous sliding contact of upper and lower cusps of all around the dental arch during all closed grinding movements of the mandible

Important for stability and retention of the dentures
(No tipping of the denture during centric and eccentric movement)
• In order to achieve balanced articulation:
  i) Balance in protrusion
  ii) Lateral balance
Occlusion in RPD

- Occlusal form of teeth on RPD must conform to already established occlusal pattern
- Exception:
  1. RPD opposing complete denture
  2. Only anterior teeth remain in both arches

In these cases, teeth arrangement should follow complete denture.
Factors that may affect positioning of artificial teeth in a partial denture

- Clasp
- Contour of the residual ridge
- Opposing teeth
Desirable occlusal contact for RPD

Aim-to enhance stability of RPD

1. Simultaneous bilateral contact of opposing teeth in CO
2. Tooth supported RPD

- Occlusion for tooth supported RPD may be arranged similar to occlusion in harmonious natural dentition
3. FU opposes lower PD

- Bilateral balanced occlusion in eccentric movement (to promote stability of complete denture)
- Not necessarily balanced in protrusion – to allow for better aesthetic, phonation
4. PU with bilateral distal extension (Kennedy Class I)

- Simultaneous contact on working and non-working side
- Because upper teeth are usually arranged lateral to residual ridge
5. PU or PL with unilateral distal extension (Kennedy Class II)

- Working side contact only.
- Non working side contact would not enhance stability as this side is supported by framework.
6. Kennedy Class IV

- Contact of opposing teeth in CO to prevent overeruption
- Contact of anterior teeth in eccentric movement is avoided to avoid forces on maxillary anterior residual ridge
References

• McCracken’s Removable partial prosthodontics. 11th edition. Elsevier, Mosby
• Some illustration are courtesy of Dr Adam Husein