Introduction & Components of Removable Partial Dentures

Department of Prosthodontics & Implantology, SRM KDC&H
Prosthodontics
Restoration or replacement of missing teeth & contiguous tissues

Fixed
Crowns, Onlays
Fixed Partial Dentures (Bridges)

Removable
Complete Dentures
Removable Partial Dentures

Maxillofacial
Congenital Conditions
Cleft palate
Acquired Conditions
- Injuries
- Cancer
Facial & Intraoral Prostheses

Implants
Partial edentulism
Treatment Options in Partial Edentulism

- No Replacement
- Fixed Partial Denture (FPD)
- Removable Partial Denture (RPD)
- Implant crowns/FPD
- Extractions & Complete Denture
Treatment Option: No Replacement

- Patients can function with as few as 20 occluding teeth
- No significant difference in
  - chewing
  - discomfort
Treatment Options

Partial Dentures

- Prosthesis replacing one or more, but not all teeth
- Supported by teeth (abutments) and/or mucosa
- May be fixed or removable
Fixed Partial Denture (FPD)

Removable Partial Denture (RPD)
Treatment Option: FPD

- Patients prefer to RPD
- Porcelain ± Metal
- Cemented
- Need tooth (abutment) at either end
Treatment Option: FPD
Treatment Option: FPD
Treatment Option: FPD
• Must prepare (grind down abutments)
• If too long, flexes, loosens or breaks
• more expensive
• If too long, flexes, loosens or breaks
Treatment Option: RPD

- Can be removed & replaced by patient
- Less expensive
Indications for RPD

- Edentulous area too long for fixed prosthesis
- Longer than 4 units is more complex
Indications for RPD

No posterior abutment for a fixed prosthesis
Other Indications for RPD

- Need for immediate replacement of extracted teeth
- Cost/patient desire considerations
- Cross-arch stabilization of teeth needed
Treatment Option:

Complete Dentures

Remaining teeth are hopeless

Other options are too complex/expensive
Treatment Option: Implant Prostheses

- Implant Crowns
- Implant Bridges
- Implant Dentures
Types of RPDs

Definitive - Cast partial denture

Interim - Acrylic partial denture
Interim Denture
Transitional Denture

• Prosthesis to which teeth will be added
• Replaced after post-extraction tissue changes
• Made with intention of subsequently altering it
Components of RPD

- Major connector
- Minor connector
- Direct retainers
- Indirect retainers
- Rests
- Denture base
- Artificial teeth
Components of an RPD

Major Connector

- Connects parts together
- Principal functions:
  - Unification
  - Rigidity
Components of a RPD

• **Minor Connector**
  • Connects other components to the major connector
  • **Principle functions:**
    • Unification
    • Rigidity
Components of an RPD

- **Direct Retainer**
  - Provides retention against dislodging forces.
Components of an RPD

Direct Retainer

'Clasp' or 'clasp unit' composed of:

Rest
Retentive arm
Reciprocal arm
Minor connector
Components of an RPD

- **Denture Base**
  - Covers the residual ridges
  - Supports the denture teeth
Components of an RPD

- Artificial teeth
- Replaces missing teeth