

## Outcomes of Treatment with Removable Prosthesis

Complete dentures  
Removable partial dentures  
Complete overdentures  
Partial overdentures

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## Complete Dentures

continued growth in the population  
strongly suggests that edentulism  
rates will remain constant or increase  
over the next few decades

## Outcomes

## Complications

### Treatment outcomes of Implant overdentures

#### Conclusions and implications

Treating complete denture wearers with implants to support their denture improves their chewing efficiency, increases maximum bite force, and it clearly improves satisfaction. The effect on QoL is uncertain. There is little research about maxillary overdentures.

### Complications in removable prostheses

The following mechanical complications of ISODs have been reported:

- 1) Loss of retention of attachment systems,
- 2) Replacement or activation of retentive elements,
- 3) Loosening of screws,
- 4) The need for relining or repairing the resin portion of the denture base,
- 5) Pop-out of denture teeth,
- 6) Implant fracture.

The most common mechanical complication associated with OD is maladjustment of the attachment system, regardless of the type of attachment used.



Vahidi and Pinto-Sinai, DCNA. 2015(59):215-226.

Should the attachment systems be splinted or left unsplinted?

- no difference reported in implant survival rates between splinted and unsplinted systems.
- Unsplinted design requires more prosthetic maintenance.
- The most common problem with mandibular ODs is replacement of the O-ring on ball attachments.
- The number of mechanical complications associated with the Locator attachment is lower than that for ball or bar attachments.
- that implant fractures most commonly occur with the ball attachment; they found no implant fractures with the Locator attachment

The complications associated with the bar attachment system (splinted) are:

- 1) Its bulk,
- 2) The possibility of mucosal hyperplasia around the bar,
- 3) Oral hygiene problems,
- 4) The need for adjustment of the clip,
- 5) More laboratory steps

The following are some recommended solutions for reducing the incidence of or solving the mechanical problems associated with ISODs:

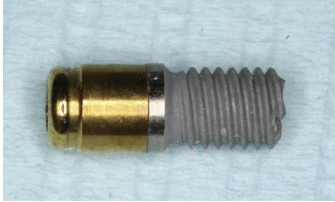
1. The ODs must have proper extension and basal support. The fit of the denture base must be checked periodically. If necessary, the denture base should be relined or rebased as indicated.
2. The retentive elements of the attachment system must be checked and replaced as necessary.
3. To avoid fracture of the denture base, ISODs should contain a metal framework.
4. The design and thickness of the metal skeleton must allow sufficient thickness of the acrylic resin.

4. Instruction in oral hygiene and maintenance of soft tissue around the attachment systems are essential, especially with bar systems.

5. The distal extension of a bar attachment in resorbed mandibular ridges must not be too long. The use of the proper length will prevent bar fracture.

6. Fabricating bar systems with CAD-CAM technology may lead to fewer mechanical failures.

7. The placement of multiple implants for supporting an OD, specifically in the maxilla, will simplify the repair of the prosthesis if an implant fails or fractures.



## Treatment outcomes in RPDs

## Outcomes

### Esthetics, function

The patients were mostly satisfied with their partial dentures. Only 2% of the patients were completely dissatisfied with their mandibular RPDs, and 1% were completely dissatisfied with their maxillary RPDs.

## Complications

A significant difference was registered between prosthodontist and patient assessments of the quality of the RPDs ( $P < .001$ ). Compared to the most satisfied patients, the prosthodontist assessed the RPDs with lower grades, whereas the few dissatisfied patients assessed their dentures worse than did the prosthodontist.

## Partial overdentures

### Complications

Outcomes

Complications

