

REMOVABLE PARTIAL DENTURES

Antonín Zicha

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Removable Partial Dentures

Antonín Zicha

Reviewed by:

doc. MUDr. Jiří Zemen, Ph.D., Faculty of Medicine in Pilsen, Charles University

MDDr. Mária Frolo, Ph.D., MBA, Faculty of Medicine in Pilsen, Charles University

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ebooks@karolinum.cz

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1. INTRODUCTION TO REMOVABLE PARTIAL DENTURES

Removable partial dentures (RPDs) are a universal alternative applicable for the replacement of lost or missing teeth. RPDs are useful in large partially edentulous span cases.

They can be used in almost all types of dental arch defects, from cases where only one tooth is missing to situations where only one tooth remains in the jaw. However, a removable partial denture is not always the best final treatment for every given situation, and not every missing tooth has to be replaced immediately. This applies to situations where functional impairment is not expected and where no other disorders of the stomatognathic system are likely to develop.

On the other hand, it is always necessary to consider whether the application of a partial denture could increase the risk of adverse effects, particularly the development of:

- dental caries,
- marginal periodontitis,
- allergic reactions.

Thus, the expected benefit of the therapeutic effect must be weighed against the possible risks associated with the application of a removable partial denture.

1.1 DEFINITION OF REMOVABLE PARTIAL DENTURES

A removable partial denture (RPD) restores a partially defective dental arch. The remaining teeth are used to provide stability and retention of the denture and, in certain cases, also to transfer masticatory load.

The denture is freely detachable from the mouth. The patient can remove and insert it on their own as required.

1.2 INDICATIONS AND CONTRAINDICATIONS FOR REMOVABLE PARTIAL DENTURES

There is a very wide range of dental arch defects. Between fully dentulous jaws with 28 teeth and jaws with only one remaining tooth, there are thousands of possible combinations of defects. Because of this, there is a broad spectrum of technical possibilities in the design of partial dentures.

The following factors must be considered when deciding whether a partial denture is suitable:

- the patient's general health status,
- the current condition of the stomatognathic system,
- the number of missing teeth,
- the arrangement of teeth in the dental arch,
- the size of the dental arch defects,
- the curvature of the dental arches,
- the biological condition of the remaining teeth,
- the quality of the basal seat in the edentulous regions of the dental arch,
- the type of transfer of masticatory load and forces,
- aesthetic expectations,
- the level of oral hygiene,
- possible time limits.

Because removable partial dentures offer many construction options, they are well suited to meet these individual and often complex requirements. Even patients with seemingly similar types of dental arch defects may require different denture designs due to differences in tooth distribution or supporting conditions.

Removable partial dentures are indicated for all classes of dental arch defects. They are most commonly indicated for Class II and III defects (according to Voldrich). In Class I defects, a removable partial denture is used when a fixed denture cannot be provided or when it is contraindicated (refer to contraindications of fixed dentures and scheme 1). In some situations, the treatment plan may involve more than one type of partial denture (for instance, initially an immediate denture with mucosal transfer of masticatory load, followed later by a definitive denture with dento-mucosal support). In certain situations, the combination of a removable partial denture with a fixed prosthodontic restoration is beneficial, purposeful, or even necessary.