

The Interim RPD



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Advanced Prosthodontics

Terms

- “flipper”
- “temporary”
- “transitional”
- “treatment”
- “provisional”
- “Interim”

“flipper”

- A slang term used to describe the way a child patient can flip the prosthesis in and out with his tongue.
- Often placed as an immediate for emergency purposes.

“temporary”

- It is always best to avoid the use of this term as it implies that the prosthesis which follows will be “permanent.”

“transitional” RPD

- An RPD which is worn during some transitional period, usually the transition from wearing an RPD to wearing a complete denture.
- Often the existing teeth are in such poor shape that you expect the transition period will be short and hesitate to put time and money into dental heroics. May also be called a “convertible” RPD.
- May be an immediate.

“treatment” RPD

- Worn to treat a condition or when the treatment sequence is complicated and the outcome uncertain requiring a delay in more definitive restoration till the outcome becomes more clear.
- Example: when perio treatment of several teeth is questionable.

“Provisional” RPD

- Similar to the Treatment RPD.
- Worn when diagnosis is complicated or must be delayed for some reason.

“Interim” RPD

- A prosthesis which is worn for a predetermined period of time during which more definitive treatment must be delayed.
- A definitive restoration is planned following the interim period.

Advantages of the IPD

- Easily modified
 - add to or subtract from
 - change VDO
 - provide diagnostic information

Advantages of the IPD

- Simple in design
 - invites abuse
 - complexity increases with the number of missing teeth, occlusal load, and predicted length of wear
 - Mandibular more complicated than maxillary

Advantages of the IPD

- Quick and easy
 - May expedite removal of hopeless teeth on an immediate basis
 - **OFTEN THE PLANNING AND DESIGN PHASES ARE NEGLECTED RESULTING IN LOST CHAIR TIME AND AN INFERIOR PROSTHESIS**

Advantages of the IPD

- Cost
 - Increases with design complexity
 - **A POOR CHOICE FOR PATIENTS WHO WILL NEVER BE ABLE TO AFFORD A DEFINITIVE RPD**

Disadvantages of the IPD

- **Trauma** to soft tissue and periodontium
 - Due to poor design or prolonged wear
 - Due to neglect by the DDS
- **Breakage**
 - Mandible > maxilla
 - occlusal load > esthetics only
- **Tooth movement**
 - From un-reciprocated clasps



Observe soft tissue trauma from a poorly designed IPD with unsupported occlusal load



To avoid iatrogenic trauma from an IPD

- Wear for a short period of time
- Avoid occlusal loading
- Use rests when loading is necessary
- Block out gingival margins and undesirable undercuts before processing
- Monitor use and hygiene



Note planned occlusal load unresisted by rests on remaining teeth



Note "lingual stripping" due to loaded IPD

Uses of the IPD

- **Esthetic replacement of a missing anterior tooth.**
 - No functional loads
 - For esthetics only
 - Often an immediate following trauma
 - Often in children



Uses of the IPD

- **Space maintenance**
 - Young patient, large pulp
- **Surgical splint**
 - Hold or shape soft tissues during healing
- **Patient Conditioner**
 - Large tongue, uncertain cooperation
- **Trial Prosthesis**
 - To establish the legitimacy of complaints in a potential Implant patient
 - Establish VDO, CR, etc.

Uses of the IPD

- Diagnostic adjunct
 - Improve occlusal plane, re-establish VDO, CR
 - Extrude or overlay teeth
 - TMD problems



Uses of the IPD

- Improve mastication
 - Provide occlusal support to protect a few remaining teeth from occlusal overload while other treatment is rendered
 - Requires some form of occlusal rests to protect the soft tissue from trauma
 - Rests are usually neglected due to lack of forethought, lack of knowledge, poor planning, or laziness!!

Uses of the IPD

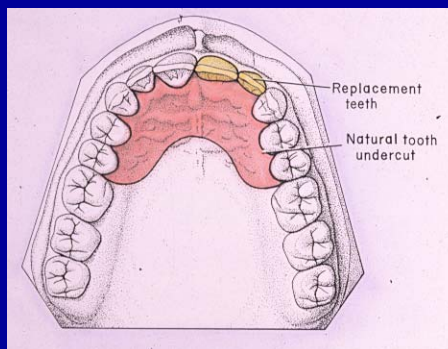
- Medical emergency, poor health
- Adjunctive orthodontics
 - Add springs, elastics
 - Extrude teeth
 - Slow and inefficient for orthodontic purposes
 - Limited usefulness
- Tissue Conditioning
 - Of abused soft tissues

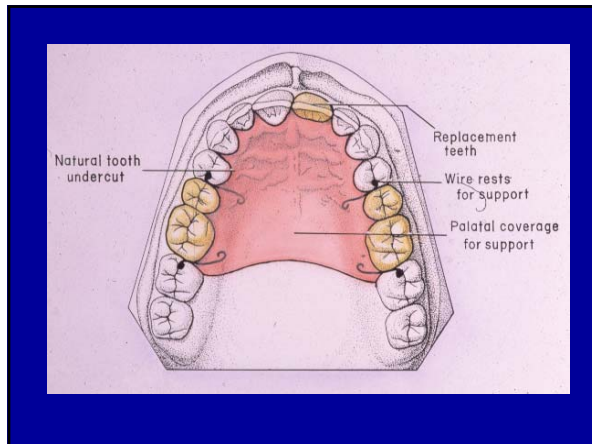
IPD Design

- Goals
 - Replace teeth
 - Avoid trauma when replacing function
- Design considerations
 - Support
 - Retention
 - Rigidity
 - Occlusion

Support (use of rests)

- Support becomes more important as the occlusal load or period of wear increases.
- Not a consideration in the maxilla when replacing teeth only with no occlusal load
- Will strip lingual gingiva in the mandible if function is provided without support





Support (type of rests)

- Wrought wire (flat or round)
- Ball clasps
- Acrylic extensions over cingulum rests
- Cast rests (when heavy function and long wear is expected)

A diagram of a maxillary dental arch showing support mechanisms. Labels include: "Replacement teeth" pointing to yellow artificial teeth; "Wire rest" pointing to a metal rest on a natural tooth; and "Natural tooth undercut" pointing to a hook on a natural tooth.



Support (prepared rest seats)

- Many dentists are hesitant to prepare rests for this "temporary prosthesis"
- If it is a true interim prosthesis and a definitive prosthesis is planned in the future, the abutments will eventually be prepared in some fashion- so why not do it now to protect the soft tissues?

Support (types of prepared rest seats)

- Occlusal rest
- Cingulum rest
- Incisal rest
- Composite rest- easy to place and remove

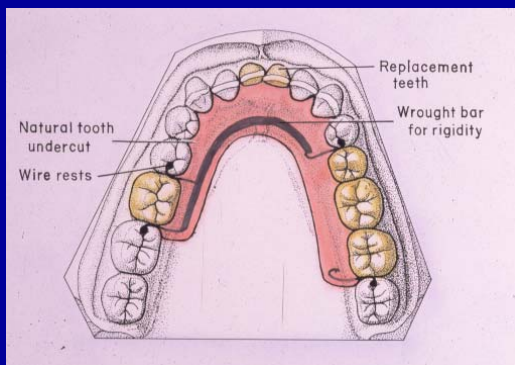


Retention

- Natural tooth undercut
 - lingual of remaining teeth
 - when ever possible
- Composite undercut
 - easy to place on lingual surfaces
 - Easy to remove
- Wrought wire – LAST CHOICE
 - Increases complexity

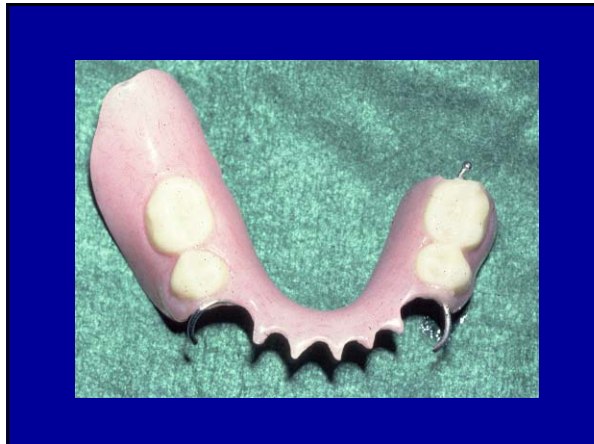
Rigidity

- Mandible
 - Important consideration
 - Can't add bulk
 - Ww or lingual bar material (will add rigidity but not strength; will keep IPD functioning if breakage occurs)
- Maxilla
 - Less important due to support from the palate
 - Still need rests when occlusal function is needed



Occlusion

- Avoid when possible by doing esthetic replacement only
 - Simplifies design requirements
 - Reduces planning time
 - Reduces breakage
- Use rests when occlusal function is needed



Technique

1. Diagnosis and treatment planning
Is an IPD needed, how will it function?
2. Mounted diagnostic casts- CO or CR
Depends on # of remaining teeth
3. Survey and Design
Too often neglected
4. Mouth preps
Too often neglected
5. Final Impressions for master casts

Technique

6. Survey and block out undesirable undercuts on Master cast
7. Duplicate Master cast forming the PROCESSING CAST
8. Mount the processing cast, set teeth, wax to final form, process and recover.
9. Adjust IPD to Master Cast (saves chair time, IPD fits and functions better)
10. Insertion and follow-up.

Recommendations

- 1. Avoid use of the IPD when possible.
- 2. Limit design complexities by limiting function and period of wear.
- 3. Take time to properly design.
- 4. Do mouth preps and use rests when indicated.
- 5. Follow carefully for signs of iatrogenic trauma.

Fabrication



Fabrication



Fabrication



Fabrication



Fabrication



Fabrication



Fabrication



Lab Summary

- Have cast of yourself from bruxism exercise
- Paint cast with Al-Cote
- Sprinkle or paint on Ortho resin with pink Ortho monomer
- Allow for initial set and then place in rubber bowl with warm water
- Trim and Polish
- Proper sanitation and insert in your own mouth
- Save cast for Essix exercise

QUESTIONS?

...Now for the final part of the lecture...