**Supplement 5a. Patient reported outcomes (PROMs): removable prostheses.**

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| **Author/date** | **Prosthetic rehabilitation type** | **Type of PROMs** | **PROMs evaluation method** | **Results** |
| 1. Eccellente et al. 2011 | Maxillary overdentures Syncope Abutments retained | Satisfaction | 7-items questionnaire (insufficient, sufficient, excellent):  Operative phase  Postoperative phase  Phonetics  Masticatory function  Esthetics  Denture stability  Oral hygiene | Operative phase: insufficient 16%, sufficient 51%, excellent 33%  Postoperative phase: insufficient 9%, sufficient 49%, excellent 42%  Phonetics: insufficient 2%, sufficient 51%, excellent 47%  Masticatory function: sufficient 42%, excellent 58%  Esthetics: insufficient 7%, sufficient 56%, excellent 37%  Denture stability: sufficient 24%, excellent 76%  Oral hygiene: insufficient 5%, sufficient 31%, excellent 64% |
| 2. Zhou et al. 2013 | Maxillary overdentures supported by:  Group 1: telescopic crowns  Group 2: bar attachment  Group 3: locators | Satisfaction | Questionnaire (score 0 – unsatisfied, 1 – partially satisfied, 2 – fully satisfied):  Facial contour  Comfort  Speech  Function | Group 1:  Facial contour: all patients - 2  Comfort: all patients - 2  Speech: all patients - 2  Function: all patients – 2  Group 2:  Facial contour: all patients - 2  Comfort: 9 patients – 2, 1 patient - 1  Speech: all patients - 2  Function: all patients – 2  Group 3:  Facial contour: all patients - 2  Comfort: all patients - 2  Speech: all patients - 2  Function: all patients – 2 |

**Supplement 5 b. Survival of restorations, technical complications**

**Fixed prostheses.**

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| **Author** | **Year** | **Survival of prostheses** | **Technical complications** |
| 1.Adell et al. | 1986 | NR | NR |
| 2. S. W. Yi et al. | 2001 | 100% | 3 fractures of porcelain and 1 of acrylic teeth |
| 3. Martens et al. | 2014 | NR | NR |
| 4. Tallarico et al | 2016 | 100% | During healing period: 4 complications (prosthetic screw loosening, fracture of acrylic provisional prostheses).  After definitive prosthesis delivery: 4 complications (fracture of veneering material). |
| 5. Li et al. | 2017 | Provisional prostheses: 85%  Definitive prostheses: 100% | During healing period: 3 complications (fracture of provisional prostheses).  After definitive prosthesis delivery: 5 patients (29.5%) experiences mechanical complications (abutment screw loosening, artificial teeth separation) |
| 6. Cercadillo-Ibarguren et al. | 2017 | 100% | No major technical complications (i.e., no framework fracture or mobility of the prosthesis). |
| 7. Windael et al. | 2018 | 100% | NR |
| 8. Barootchi et al. | 2020 | 5-year survival:  Zirconia prostheses: 93.7% ± 5.5%  Metal-acrylic prostheses: 83.0% ± 11.1%  8-year survival:  Zirconia prostheses: 88% ± 8.8% Metal-acrylic prostheses: 67.6%  ± 14.8%  10-year survival:  Metal-acrylic prostheses: 51.7% ± 12.1% | Metal-acrylic group  Minor complications:  Single tooth fracture: 94 times, 22 prostheses  Multiple teeth chipping/fracture: 40 times  Zirconia group  Minor complications:  Single tooth chipping: 36 times, 9 prostheses  Multiple teeth chipping/fracture: 17 times  Number of complications was slightly higher in meta-acrylic group (72.1% vs. 61.3%).  Major complications (i.e., the ones that could be repaired) were more prominent in metal-acrylic group (41.9% vs. 25.8%)  Catastrophic (i.e., total failure): 2 prostheses per each group. |

NR- not reported.

**Supplement 5 c. Survival of restorations, technical complications**

**Removable prostheses.**

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| **Author** | **Year** | **Survival of prostheses** | **Technical complications** |
| 1. Van Assche et al. | 2012 | 100% | Screw loosening (2 patients);  Need of relining and adaptation (1 patient.). |
| 2. Eccellente et al. | 2011 | 96% | Abutment loosening (3 patients);  Partial denture fracture (7 patients);  Complete denture fracture (2 patients). |
| 3. Zou et al. | 2013 | 100% | Telescopic crown attachment group:  58 maintenance procedures required (4 abutment/screw loosening, 4 matrix activation/renewals, 8 prosthetic teeth replacements, 14 denture margin adaptation, 28 overdenture rebasings).  Bar-retained group:  51 maintenance procedures required (3 abutment/screw loosening, 2 matrix activation/renewals, 4 prosthetic teeth replacements, 12 denture margin adaptation, 30 overdenture rebasings).  The incidence of maintenance efforts tended to be higher in the telescopic crown group (p = 0.16). |