
H. Antoun, M. Karouni, Paris, France

Purpose
This case series evaluated peri-implant soft tissue of immediately placed and provisionalized maxillary anterior single implants. The Pink esthetic score has been used to rate the esthetic outcome of the treated cases.

Methods:
Fifteen patients each received a single implant in the esthetic zone were consecutively followed. The treatment consisted of tooth extraction, implant placement, anorganic bone graft and connective tissue graft. Soft tissues were evaluated by 7 observers before the surgery (v1) and at least 1 year after final prosthesis placement (v2). They were shown photographs of 15 single-tooth implant crowns and variables were evaluated vs. a natural reference tooth: mesial papilla, distal papilla, soft-tissue level, soft-tissue contour, alveolar process deficiency, soft-tissue color and texture.

Results:
Of the inserted implants 100% survived and of the definitive crowns mounted a survival of 100% was observed. Data were analyzed with “Student’s t-test” and we noticed that the mean total PES score is 5.73 (±1.45 SD) and 7.35 (±0.97SD) on v1 and v2 respectively and varied from 3 to 8.42 on v1 and from 6 to 9.2 on v2. Statistical analysis revealed significant difference between presurgery and at the follow up examination of the anterior single implant (P=0.0003). The scores of the variables increased significantly at a mean follow-up of 4.26 years (range:1 to 8).

Conclusion:
Within the limitations of this study, the esthetic outcome of soft tissues around anterior tooth implant after atraumatic tooth extraction associated to a hydroxyapatite bone graft and connective tissue graft seems to be maintained or improved significantly compared with baseline and according to PES assessment. A prospective study with more patients and a longer mean follow up is needed.

Figures 1 to 3: Vestibular views at baseline, surgery and final prosthesis placement

Chart 1: Distribution of the sites

Chart 2: Bar diagram to illustrate mean values of the 5 criteria of the PES

References:
