



## Treatment of peri-implant mucositis using a resorbable chitosan brush – a pilot clinical study

Johan Caspar Wohlfahrt, Anne Merete Aass, Odd Carsten Koldsland

### Hypothesis and/or Aim

The aim of this study was to evaluate a twisted brush with bristles made of chitosan for treatment of peri-implant mucositis.

### Materials and Methods

This was a consecutive clinical case series of six months' duration. 13 patients with peri-implant mucositis were treated with a chitosan brush (Labrida BioClean®, LBC) seated in a slow speed rotating dental bur peace at approximately 1000 RPM. After finished cleaning the peri-implant crevice was rinsed with sterile saline. A second maintenance cleaning was performed after 3 months. Clinical parameters of peri-implant inflammation i.e., Probing Pocket Depth (PPD), modified Bleeding Index (mBI) and modified Bleeding on Probing Index (mBoP) were recorded before treatment and compared with recordings at 2 and 4 weeks and at 6 months after the baseline treatment. Intraoral radiographs were taken at baseline and 6 months. An alpha level of 0.05 was used for statistical comparisons.

### Results

Significant improvements in PPD were demonstrated at the reevaluation 4 weeks after the treatment ( $p < 0.01$ ). Significant improvements in mBI and mBoP were demonstrated between baseline and all later examination timepoints ( $p < 0.001$ ). None of the implants treated showed loss of osseous attachment at the 6 months' control.

### Conclusion

**Within the limitations of this case series it was shown that treatment of peri-implant mucositis with LBC leads to significant reductions in parameters of inflammation.**

### Publication

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