

### INTRODUCTION

Mucoadhesive dressing (Ora-Aid, TBM, South Korea), a recently developed intraoral bandage/dressing system, reportedly has strong adhesion when applied on the gingiva and hydrated in the oral cavity. Ora-Aid is a dressing system with an attachment side and a protection side. The inner attachment side is a mucous-adhesive layer which has strong adhesion when applied and hydrated on oral mucosa. The outer protection side, a water-insoluble polymer, which covers the wound to protect from mechanical trauma in the oral cavity. The dressing can be dissolved within 24 hours after application avoiding plaque accumulation around the dressing. The present study aimed to compare the tissue response and patient compliance of mucoadhesive dressing with that of COE-PAK™ following a modified Widman flap surgery.

### METHODS & MATERIAL

35 patients were involved in this study. Patients were selected based on the following inclusion criteria: age 20–85, chronic periodontitis with PPD>4mm, completed phase I therapy, and required periodontal flap surgery in more than 2 quadrants. Patients undergoing steroid treatment within previous 3 months, smokers, uncontrolled DM, and those exhibiting signs of delayed healing were excluded.

### Study design

Mucoadhesive dressing was applied to the randomly assigned experimental segment and the other segment was covered by conventional paste type periodontal dressing after MWF. 1 day after the flap operation, all patients were recalled to record the postoperative pain and discomfort scores. 2 weeks after the surgery, the subjects were examined and GI, width of attached gingiva, gingival recession and PPD were recorded.

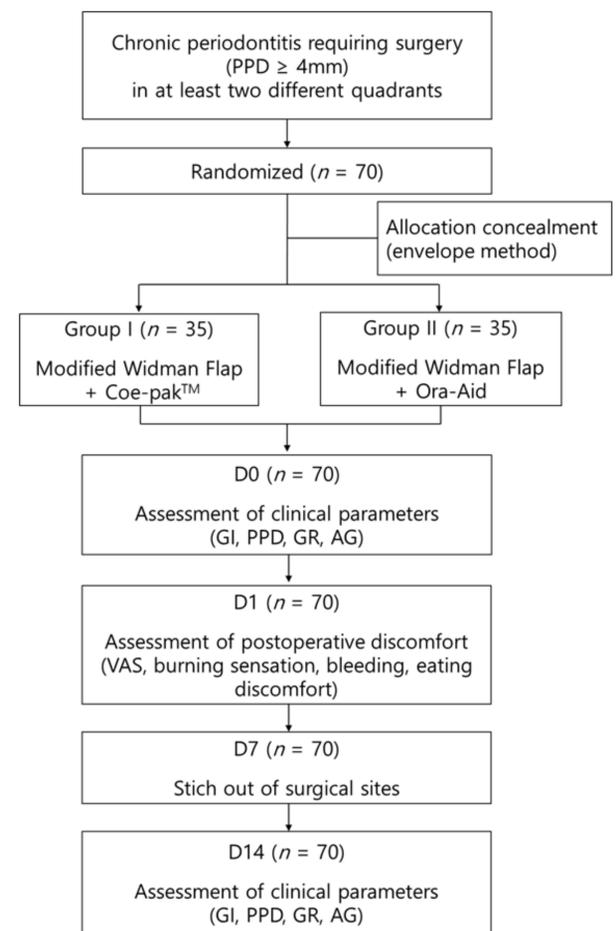


Figure 1. Structure of oral mucoadhesive dressing (Ora-Aid).



Figure 2. COE-PAK™(Left) and Ora-Aid (Right) were applied after modified Widman flap surgery

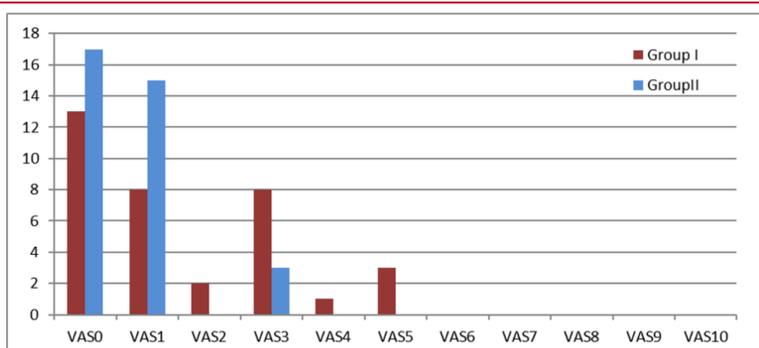
### Study flow chart



### RESULTS

There were no significant differences between the two groups on day 0 and day 14 for gingival index and probing pocket depth. Gingival index and probing pocket depth decreased significantly on day 14 in each group. The mucoadhesive periodontal dressing treated group showed lower level of VAS than conventional pasty type periodontal dressing group.

### VAS on Day 1 after Modified Widman Flap



VAS on D1 (Wilcoxon signed rank test, P = 0.099). Ora-Aid treated sites showed less pain after the flap surgery

### CONCLUSION

Adhesive periodontal dressing (Ora-Aid) is easily applied and has better esthetic appearance without an unpleasant taste or smell. With the considerations of clinician's personal preference and patient's acceptance (e.g., postoperative pain and discomfort), mucoadhesive dressing might be suggested as a viable choice after flap surgery as a dressing material.