Statement of problem: Various Locator abutments and attachments are available commercially for use in overdenture patients. Patients are advised to use cleansing agents to keep their overdentures clean. The effect of different cleansing agents on attachments with different retention is not known.

Purpose: The purpose of this in vitro study was to evaluate the retention of 3 Locator abutment attachments after they were soaked in 3 different cleansing solutions.

Material and methods: An implant analog with a diameter of 4.1 mm was embedded into acrylic resin, and 1 Locator abutment was placed onto the analog. Seven specimens of clear, pink, and blue Locator attachments (n=7) were soaked in 3 different denture-cleansing solutions (NaOCl, sodium perborate, sodium perborate-sodium bicarbonate) for a time simulating 6 months of clinical use. The control group was soaked in tap water. A testing machine was used to test the attachments’ retention.