Soft tissue and marginal bone conditions at osseointegrated implants that have exposed threads: a 5-year retrospective study.

Lekholm U, Sennerby L, Roos J, Becker W.

Brånemark Clinic, Public Dental Health Service, Göteborg, Sweden.

The purpose of this retrospective clinical investigation was to study possible soft tissue complications and marginal bone resorption related to exposed threads of osseointegrated Brånemark oral implants during a 5-year period. Group 1 comprised 27 patients with 38 test implants that had not become completely covered with bone at implant placement. Thirty control implants in 25 of the patients were each next to a test implant and had no exposed threads initially. Group 2 comprised 51 patients with 107 test implants that had developed marginal bone loss beyond the second thread, as judged radiographically at the first annual checkup. Forty-eight control implants showed no or minor marginal bone resorption up to the first thread. Initial marginal defects and fenestrations at Brånemark implants (group 1) did not lead to mucosal problems or progressive marginal bone resorption during the first 5 years of function. Moreover, bone resorption, seen after the first year of loading at initially completely bone-covered implants, did not lead to any specific soft tissue problems, nor did it result in any further progressive bone resorption during a subsequent 4-year period. Based on the observed low incidence of soft tissue pathology at implants with exposed threads, it is suggested that bone augmentation techniques in the situations studied be used with restriction.