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**“Screw-vs cement-  
implant-retained resto-  
ration: an experimental  
study in the beagle.  
Part 1. Screw and abut-  
ment loosening”**

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*Traduzione in italiano a cura Bone  
System del Titolo e dell'Abstract, tratti  
dalla pubblicazione indicata, alla  
quale si rimanda per una visione inte-  
grale e per ogni approfondimento.*

### **Abstract**

The causes of implant failures can be biological or mechanical. The mechanical causes include fracture of the implant, fracture of the abutment, and loosening of the abutment. Numerous studies show that abutment loosening constitutes one of the marked implant postsurgery complications requiring clinical intervention. The aim of the present study was to evaluate the incidence of the screw loosening in screwed or cemented abutments. Six adult male Beagles were used.

In each dog, the first molars and 2 premolars were extracted. The sutures were removed after 7 days. After 3 months, 10 implants were placed in each dog, 5 in the right mandible and 5 in the left mandible.

The abutments either were screwed in (n 1/4 30) by applying a total strength of 30 N/cm or were cemented (n 1/4 30). After 12 months, 8 (27%) loosened screws were present in screwed abutments, whereas no abutment loosening was observed in cemented abutments (P 1/4 .0001). Screwed abutments are often submitted to nonaxial loads that determine screw and abutment loosening.

**“Riabilitazione su impianti avvitati vs cementati: uno studio sperimentale sui cani. Parte 1. Allentamento della vite e dell'abutment.”**

### **Riassunto**

*N.D.*