IIIa02-025

Analysis of the tensile strength of straight and angled abutments in narrow diameter implants.

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Despite the success of osseointegrated implants, some biomechanical problems, such as loosening or fracture of the abutment, crown fixation screw loosening and prosthetic instability, are common problems reported in the literature. Thus, the objective of the present study was to analyse the tensile strength of straight and angled abutments in narrow diameter implants installed by means of friction. The specimen was composed of an implant of 3.3x11mm fixed 2 mm above of a resin block. The abutments were fixed by friction receiving 3, 5 and 7 beats along the implant axis, and were positioned with 0, 10 and 20 degrees of angulation. The abutments were subjected to tensile force, totalizing 10 repetitions for each test. The results showed higher values of removal strength for the abutments with 7 beats, and no statistical difference with 5 beats suggesting better mechanical stability.