2. Invitro evaluation of microlekage at implant abutment interface of titanium and zirconia abutments under different torquing forces

Aishwarya Nayak

SDM College of Dental Sciences.

Aim: Evalauation of microlekage at titanium implant abutment and titanium implant zirconia abutment interface under 20n and 30 n torque. Background. The amount of bacterial infiltration between the implants and the abutments depends on the materials, the fit accuracy between the pieces & tightening torque applied to the connected components which may ultimately can lead to peri implantitis and bone loss around this area.. . Materials & methods:. 60 titanium implants were taken and divided into two groups, group a consisting of 30 titanium implant and abutments and group b consisting of 30 titanium implants with zirconia abutments. These groups were further classified into 4 sub groups of 15 titanium implant abutment screwed with a torque of 20 ncm ; 15 titanium implant abutment screwed with a torque of 30 ncm; 15 titanium implant with zirconia abutment screwed with a torque of 20 ncm; 15 titanium implant with zirconia abutment screwed with a torque of 30 ncm. The sterilized implants were assembled and then inserted in sterile brain heart infusion broth tubes innoculated with enterococcus. The tubes were incubated for 24hours,48 hours,120 hours and 7 days.. The entire apparatus was removed from the tubes,dried aseptically and placed in 1% sodium hypochlorite solution for 20 minutes again dried aseptically; dismantled

and put in sterile brain heart infusion broth tubes,incubated for 48 hours and assesed for mirobial growth. Results:. Data will be subjected to statistical analysis by kruskal-wallis anova test and mann-whitney u-test.

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