

Titanium v Titanium Alloy

Last Updated Thursday, 21 September 2006

Description

There are actually 5 grades of titanium that may be used for dental implants. Grade 1 through 4 are medically pure titanium and grade 5 is a titanium alloy (Ti6A14V). simply put, the higher the number, the stronger the metal but the more impurities are found. Type 1 titanium is too soft for dental implants and Type 2 might also be too soft. Type 3 seems to approach the ideal in terms of strength and level of impurities.

Advantages

The stronger the metal, the less problems with breakage and stripping. Grade 5 is the strongest.

Disadvantages

Some people seem to be worried about the aluminum in the grade 5 titanium. There is no evidence that this is a concern and studies have shown this material to be equal to the pure forms.

Recommendations

Anything grade 3 titanium or above seems to be acceptable for endosseous dental implants.