

M&M 2020



MICROSCOPY & MICROANALYSIS

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Advance Program & Pre-Meeting Guide

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ANALYSIS OF BONE-IMPLANT INTERFACE WITH OSSEOINDUCTION TREATMENT

Julia C. Mirza Rosca¹, Pedro P. Socorro Perdomo¹, Nestor R. Florido Suarez², Maximina Monzón Mayor³

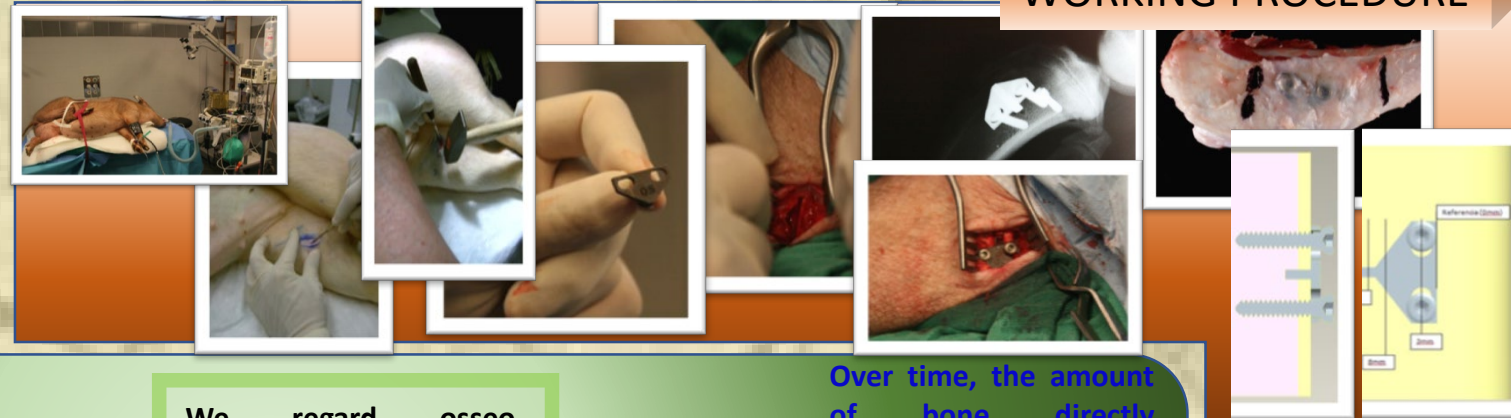
¹Mechanical Engineering Department, University of Las Palmas de Gran Canaria, , julia.mirza@ulpgc.es

²Processing Engineering Department, University of Las Palmas de Gran Canaria,

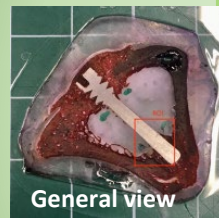
³Biology Department, University of Las Palmas de Gran Canaria.

EQUIPMENT

WORKING PROCEDURE



- ✓ There aren't toxic and carcinogenic responses of animals to implant materials.
- ✓ The EDX detected the following metals: Ti, Ca, P and Al; the ratio Ca/P of 1.65 indicating that it is similar to bone mineral phase.
- ✓ The bone was in intimate contact with the bioactive Ti6Al7Nb implant.

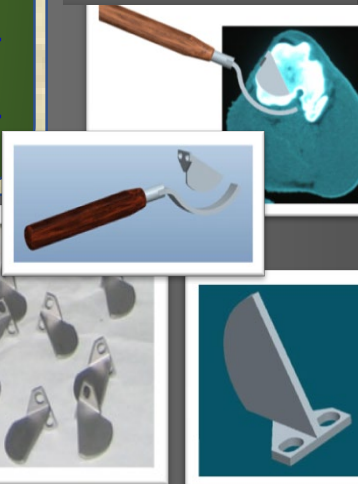


We regard osseo-inductive ability of nanostructured Ti6Al7Nb as one of the advantages of this implant in consideration for clinical applications.



Over time, the amount of bone directly bonding to the implant increased and the immature bone had formed in the earlier stages, matured and converted to lamellar bone.

TECHNIQUES



RESULTS

Standar	Conc. Al (µg/L)	Conc. Reales de Al (µg/L)	Absorbance
White Zerp	0	-0.24	0.0882
Master 1	5	5,50	0.1074
Master 2	10	9,68	0.1214
Master 3	15	15,23	0.1400
Master 4	20	19,69	0.1549
Master 5	25	25,14	0.1731

