In the present work a condyle prosthesis was created with personal specifications. There were involved two process; the manufacture of a graphite matrix by Computer Numerical Control and the Sintering process for the final sample. The mold was designed in SolidWorks® in order to analyse the material properties and shape and manufactured by numerical control in CAD-CAM. The sintering process which has the purpose to generate a porous implant based on titanium powder. The experiments were performed in human body with a great success and the samples were tested before in animals using the same process with different specifications. Titanium is a biomaterial with bioactive properties being capable of resisting corrosion and impacts inside human body. The results indicated that the implant porosity brings about a better recovery in human body due to the increasing production of hydroxyapatite.

Keywords: sintering, prosthesis, CAD-CAM

References:


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