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Biological Evaluation of Slip Casting Hydroxyapatite Intended for Cranioplasty

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In this paper are presented the results obtained for biocompatibility tests on some cranial implant synthetic models destined for using in skull bone surgery applications. The samples were made of hydroxyapatite (HAp) powders and shaped by slip casting method. Specific tests were performed to evaluate the biological properties of the bioceramic samples. In this aim microbial load tests (sanitation/sterility) and cytotoxicity assays on cell cultures-agar diffusion tests performed on L929 cells, and respectively the, MTS viability tests performed on 2 types of cells (L929 and MG-63). The results obtained after the tests showed the biocompatible character of implants, the sterile environments from microbiological point of view and also observed the absence of pathogenic biological agents.