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(57) Abstract :

The present invention relates to with detailed corrosion analysis of explanted devices. The study of total 6 different types of orthopedic metallic implant was carried out after collecting the clinical report from the doctors, who performed these implantations. The clinical report covered the purpose of im- plantation, body part where implantation was done, and physiological reasons of removal of im- plant. The metallurgical investigation to study corrosion and any other mechanical damage to the implant surface during their service period was done using the Scanning Electron Micrography. SEM presented in this paper reveals the presence of in-vitro corrosion and mechanical damage as well, which are corroborating well with clinical reports.

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