INTRODUCTION AND AIM OF WORK

INTRODUCTION AND AIM OF WORK

A biocompatible material is one which is used to replace either fully or partially a human part. When a biomaterial is applied clinically, the body recognizes its surface as a foreign material and reacts with it.

Biocompatibility in orthopaedics is divided into two main items. These are implant biocompatibility and bone graft biocompatibilty.

From the simple clinical point of view, a compatibility of a biomaterial ideally requires the following:

(a) Absence of thrombogenic, toxic, allergic or inflamatory reactions.
(b) No destruction of formed element .
(c) No changes of plasma proteins and enzymes.
(d) No immunological reactions.
(e) No carcinogenic effects.
(f) No deterioration of adjacent tissues.

The aim of this essay is to review the biocompatibility and the biocompatible materials from the biological and immunological points of view; reaction of the body against the implanted biomaterials; and the effects of implanted materials on the recepient either locally or systemically. This review will also extend to include the bone grafts.