SUMMARY AND CONCLUSION

SUMMARY AND CONCLUSION

Artificial materials (biomaterials) have been used as effective substitutes for diseased organs and tissues for more than 30 years.

Biomaterials with bulk properties which are unaffected by long-term exposure to the biological environment and possess a degree of biocompatibility that would allow the device to fulfill its intended function in vivo have been the goal of a considerable research effort.

Biocompatibility effects can be both local and systemic. A good measure of the severity of the local reaction is the thickness of the fibrous layer that forms around the implant material.

Local tissue reaction is often a response to corrosion and wear products released from the implant material. The tissue of the body can respond to such foreign debris in a physical and/or chemical sense.

Biochemical studies have shown that the periprosthetic bone loss that occurs around loose prostheses is a biologic process mediated by that tissue that forms in response to the forign material in particulate form.

Bone grafting plays a prominant role in bridging bone defects. The availability of appropriate bone for transplantation remains an important surgical problem.

The host response to bone and cartilage allografting has been known for sometime and is essentially no different than that for other organ or tissue allografts.