



Sixth lecture

***Metallic Implant Materials
, Polymeric Implant
Materials***

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What is a metallic implant?

Metal implants represent the largest fraction of biomaterials used for joint arthroplasties and fractures. Historically, titanium alloys and stainless steel provided the best results because of their relative inertness and mechanical properties, with stainless steel being slightly less stiff than modern titanium.

What types of materials are implants?

Materials Used in Implants

- Metals. The metals that are used in orthopedic implants are stainless steel, cobalt-based alloys, and titanium. ...
- Polymers. The most commonly used polymer in prosthetics is high-density polyethylene. ...
- Ceramics. ...
- Joint Replacement Surgery in Maryland.

What is the best implant metal?

Due to its tensile strength or resistance to breaking down under pressure, fractures in titanium implants rarely occur. If you want to get a robust dental implant material durable enough to last a lifetime, titanium is your best bet.

What is metallic biomaterials?

Metals are used as biomaterials due to their excellent thermal conductivity and mechanical properties. Biomaterials are artificial or natural materials, used to in the making of structures or implants, to replace the lost or diseased biological structure to restore form and function.

Which type of implant is commonly used?

endosteal implants are done in the bone and are the most commonly used implant. Screws, cylinders, blades hold the teeth for patients that have bridges or or removable dentures.