

عنوان مقاله:

Applications of Bioceramics in the Management of Orbital Floor Fractures and Anophthalmic Cavity: a Review

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خلاصه مقاله:

Biocompatible ceramics, commonly known as “bioceramics”, are an extremely versatile class of materials with a wide range of applications in modern medicine. Given the inorganic nature and physico-mechanical properties of most bioceramics, which are relatively close to the mineral phase of bone, orthopedics and dentistry are the preferred areas of usage for such biomaterials. Another clinical field where bioceramics play an important role is oculo-orbital surgery, a highly cross- and interdisciplinary medical specialty addressing to the management of injured eye orbit, with particular focus on the repair of orbital bone fractures and/or the placement of orbital implants following removal of a diseased eye. In the latter case, orbital implants are not intended for bone repair but, being placed inside the ocular cavity, have to be biointegrated in soft ocular tissues. This article reviews the state of the art of currently-used bioceramics in orbital surgery, highlighting the current limitations and the promises for the future in this field.

کلمات کلیدی:

Hydroxyapatite, Bioactive glass, Composites, Orbital floor, Orbital implants

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