

Osteoinduction is the process by which osteogenesis is induced. It is a phenomenon regularly seen in any type of bone healing process. Osteoinduction implies the recruitment of immature cells and the stimulation of these cells to develop into preosteoblasts. In a bone healing situation such as a fracture, the majority of bone healing is dependent on osteoinduction. Osteoconduction means that bone grows on a surface. This phenomenon is regularly seen in the case of bone implants. Implant materials of low biocompatibility such as copper, silver and bone cement shows little or no osteoconduction. Osseointegration is the stable anchorage of an implant achieved by direct bone-to-implant contact. In craniofacial implantology, this mode of anchorage is the only one for which high success rates have been reported. Osseointegration is possible in other parts of the body, but its importance for the anchorage of major arthroplasties is under debate. Ingrowth of bone in a porous-coated prosthesis may or may not represent osseointegration ¹⁾.

¹⁾

Albrektsson T, Johansson C. Osteoinduction, osteoconduction and osseointegration. Eur Spine J. 2001 Oct;10 Suppl 2:S96-101. Review. PubMed PMID: 11716023; PubMed Central PMCID: PMC3611551.

From:

<https://neurosurgerywiki.com/wiki/> - **Neurosurgery Wiki**

Permanent link:

<https://neurosurgerywiki.com/wiki/doku.php?id=osteoconduction>

Last update: **2024/06/07 02:56**

