Piezoelectric surgery: Applications in oral & maxillofacial surgery

Lobna Abdelaziz

Abstract

The use of ultrasonic vibrations for the cutting of bone was introduced three decades ago as an alternative to the mechanical and electrical instruments that are used in conventional oral surgery. Technique that lessens the risk of damage to surroundings of tissues and important structures such as nerves, vessels, and mucosa. It also reduces damage to osteocytes and permits good survival of bony cells during harvesting of bone. Piezoelectric surgery was first used by oral and maxillofacial surgeons for osteotomies, but recently some specific applications in neurosurgery and orthopedics have been proposed.

We review the different applications of piezoelectric surgery in oral and maxillofacial surgery that can be utilized supported by clinical examples.

Future Dental Journal 2018, December