

## فرع الجراحة

لاول مره في فرع الجراحه كليه طب الاسنان تم استخدام جهاز ( Piezotome (ultrasonic ) bone surgery في العمليات الجراحيه لغرض قطع عظام الفكين وبدون تاثير على الانسجه الرخوه للاعصاب والاوعيه الدمويه بدلا عن الطريقه التقليديه السابقه التي تؤدي الى مضاعفات عديده..

The piezosurgery device was first developed in 1988. It uses ultrasonic frequency that provide precise and safe cutting of hard tissues like tooth and bone while soft tissue like gingiva, blood vessels, nerves or sinus lining are not injured by the micro vibration which is optimally adjusted to target mineralized tissues only so the selective and thermally harmless nature of piezosurgery results in minimal bleeding and reduce the surgical trauma and complications



Piezosurgery units are available with various tips which enable them to be used in a variety of bone surgery situations. Piezosurgery applications in oral and maxillofacial surgery

- Atraumatic tooth extraction.
- Preparing windows for sinus lifts and sinus augmentation surgery.

- Harvesting block grafts of bone for ridge augmentation, e.g. from the ramus or the mental symphysis.
- Harvesting bone chips for use in guided bone regeneration.
- Distraction Osteogenesis.



**Tip for bone cutting**



جهاز piezoelectric surgery



استعمال جهاز piezosurgery لرفع سن العقل