

MECTRON PIEZOSURGERY®  
PIEZOELECTRIC LEVERS FOR  
THIRD MOLAR EXTRACTION

**new!**

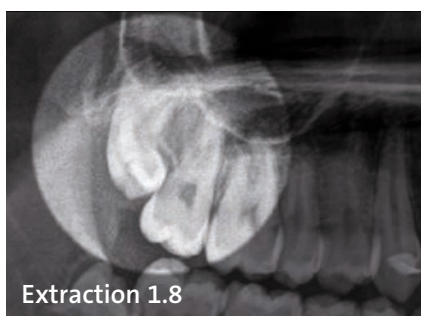


mectron

# NEW LEVERS - PIEZOELECTRIC INSTRUMENTS FOR THIRD MOLAR EXTRACTION

A review of the literature shows that piezoelectric wisdom tooth extraction is less traumatic than extraction performed with burs. In fact, the healing process is more favourable, with less morbidity for the patient, even though the procedure takes longer<sup>1-4</sup>. After years of intensive clinical and technological research, Mectron now introduces the first piezoelectric lever to facilitate the luxation manoeuvre and sometimes even third molar root extraction, especially when ankylosed.

This occurs when the manual force the operator exerts on the handpiece is added to the hammering action (typical of the Mectron PIEZOSURGERY®) which propagates from the lever into the deep periodontium. Additionally, proper use of the piezoelectric lever can significantly reduce operating time.



## CASE STUDY<sup>5</sup> - PIEZOELECTRIC LUXATION AND EXTRACTION VS. TRADITIONAL TECHNIQUE

The first prototypes of piezoelectric levers were developed many years ago and tested by Dr. Fabrizio Fontanella in more than 9,000 cases of wisdom tooth extraction. The efficiency of these levers was evaluated in a randomised, controlled study, comparing them to manual levers<sup>5</sup>, where they showed the following benefits:

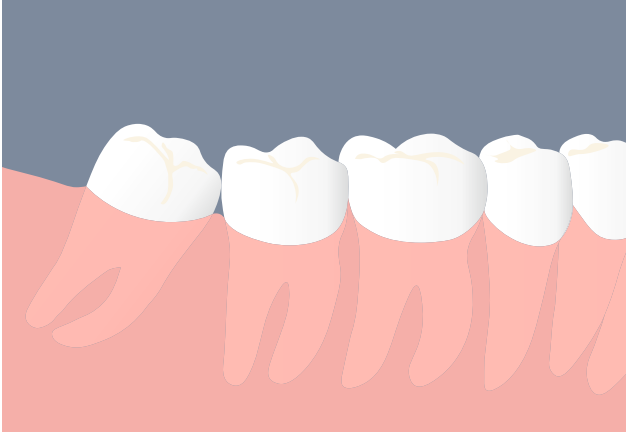
- better visibility
- maximum intraoperative control
- faster third molar extraction

extraction time in minutes

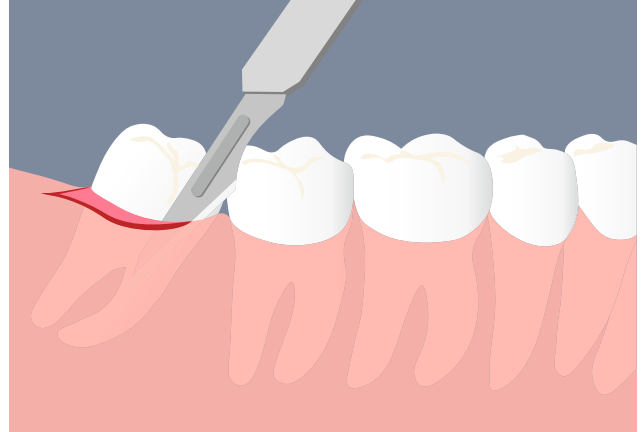
|                  | PIEZOSURGERY®<br>Test Group | Conventional technique<br>control group | p value |
|------------------|-----------------------------|---|---------|
| total            | 4.6 ± 4.5                   | 10.2 ± 13.1                             | .049    |
| maxillary molar  | 2.7 ± 2.3                   | 5.4 ± 9.4                               | .816    |
| mandibular molar | 6.5 ± 5.4                   | 15.1 ± 14.8                             | .002    |

1-4 • Spinato S., Rebaudi A., Bernardello F., Bertoldi C., Zaffe D. Piezosurgical treatment of crestal bone: quantitative comparison of post-extractive socket outcomes with those of traditional treatment. Clin Oral Implants Res. 2015-01-30 online; DOI: 10.1111/clr.12555.  
 • Piersanti L, Dilorenzo M, Monaco G, Marchetti C. Piezosurgery or Conventional Rotatory Instruments for Inferior Third Molar Extractions? J Oral Maxillofac Surg. 2014 Sep;72(9):1647-52.  
 • Rullo R, Addabbo F, Papaccio G, D'Aquino R, Festa VM. Piezoelectric device vs. conventional rotative instruments in impacted third molar surgery: relationships between surgical difficulty and postoperative pain with histological evaluations. J Craniomaxillofac Surg. 2013 Mar;41(2):e33-8.  
 • Sortino F, Pedulla E, Masoli V. The piezoelectric and rotatory osteotomy technique in impacted third molar surgery: comparison of postoperative recovery. J Oral Maxillofac Surg. 2008 Dec;66(12):2444-8.  
 5 • Fontanella, F., Grusovin, M. G., Gavatta, M., & Vercellotti, T. (2020). Clinical efficacy of a new fully piezoelectric technique for third molar root extraction without using manual tools: a clinical randomized controlled study. Quintessence international (Berlin, Germany : 1985), 51(5), 406-414. <https://doi.org/10.3290/j.qi.a44370>

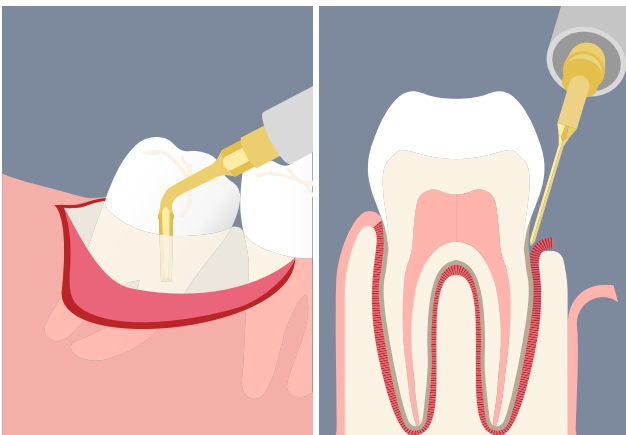
# THIRD MOLAR EXTRACTION CLINICAL PROCEDURE



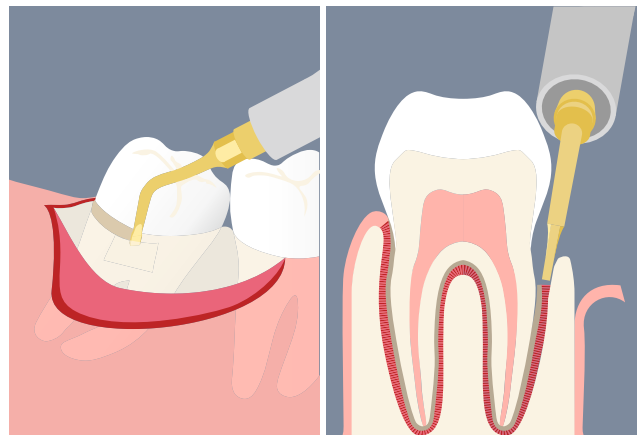
Initial situation



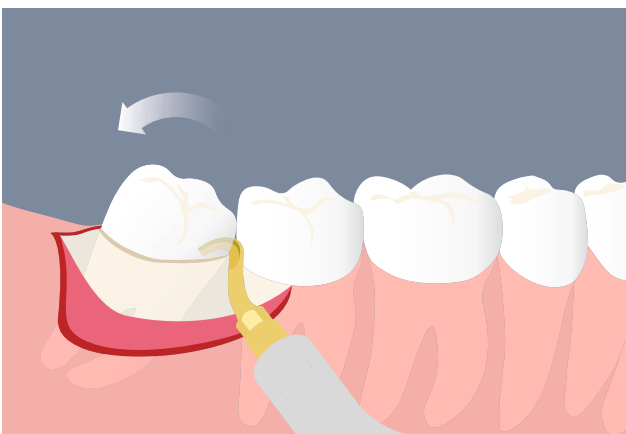
Flap detachment



Syndesmotomy with EX1 insert



Pericoronal osteotomy with SLO-H insert



Tooth luxation with EXL1 lever



Extraction manoeuvre

# PIEZOELECTRIC EXTRACTION OF THE THIRD MOLAR - THE LEVERS IN DETAIL



**LEVER EXL1**  
ref. no. 03400008

**INDICATION:** Lever EXL1 is highly versatile, enabling luxation and simultaneous root extraction in a single manoeuvre.



**LEVER EXL2**  
ref. no. 03400009

**INDICATION:** lever EXL2 (the shorter lever) has a smaller radius but makes it possible to apply greater force.



**LEVER EXL3**  
ref. no. 03400010

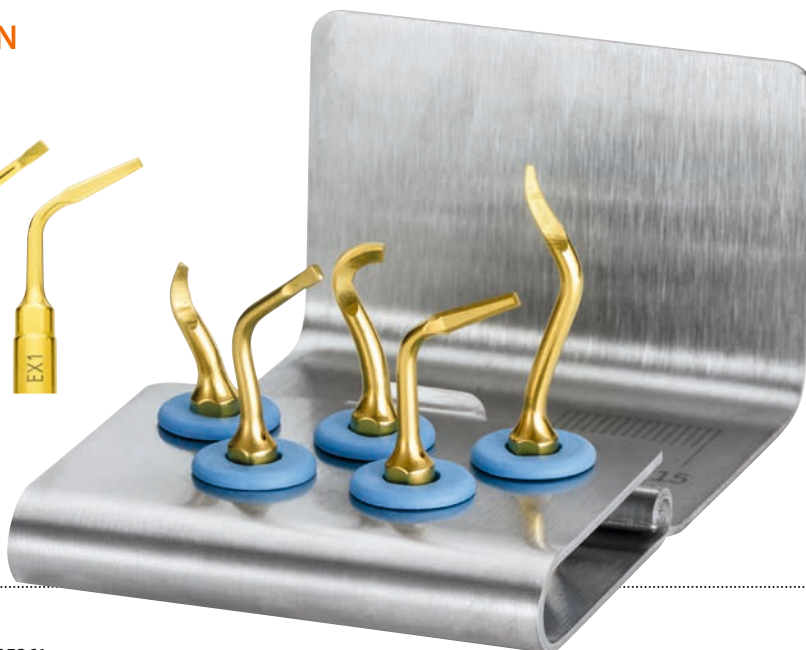
**INDICATION:** Lever EXL3 is mainly for alveolar debridement and/or removing radicular fragments from the extractive alveolus.

## SET THIRD MOLAR EXTRACTION

ref. no. 01520025

### EQUIPPED WITH

- 1 lever EXL1
- 1 lever EXL2
- 1 lever EXL3
- 1 insert EX1
- 1 insert SLO-H
- 1 insert tray



mectron s.p.a.  
via Loreto 15/A, 16042 Carasco (Ge), Italy, tel +39 0185 35361,  
fax +39 0185 351374, www.mectron.com, mectron@mectron.com



© Copyright Mectron S.p.A., Carasco, Italy  
All rights reserved. Text, images and graphics contained in Mectron brochures are protected by copyright and other property rights laws. Content cannot be copied, disclosed, modified or made accessible to third parties for commercial purposes without written permission from Mectron S.p.A.