

6th World Congress on *Dentistry and Oral Health*

July 09-10, 2026 | Frankfurt, Germany



Yousra Aly Ibrahim, Amira Galal Ismail*, Manar M. Galal*, Shahinaz N. Hassan*, Hinar Hani Al Moghazy**

Associate Professor of Endodontics, Restorative and Dental Materials Department, Oral and Dental Research Institute, National Research Centre, Cairo, Egypt.

** Associate Professor, Restorative and Dental Materials Department, Oral and Dental Research Institute, National Research Centre, Cairo, Egypt*

***Associate Professor of Endodontics, Department of Endodontics, Faculty of Dentistry, Modern Science and Arts University, Cairo, Egypt.*

Adult Pulpotomy: A New Era in Modern Endodontics

Research question

post-endodontic pain can adversely affect the patient's overall quality of life. New conservative approaches such as adult pulpotomy, using recent modalities, if well applied may provide faster pain relief compared to root canal treatment.

Background

Success of Adult Pulpotomy depends on proper case selection, accurate diagnosis, strict aseptic and haemostatic protocols, as well as the use of materials capable of promoting dentin bridge formation and pulpal healing.

Purpose

To explore different modern modalities to control the pain after Adult Pulpotomy and to explore the effect of using bioceramic materials as a pulp sealing agent on adult pulpotomy success rates.

Methodology

To compare the effect of diode laser as hemostatic and cavity disinfectant agent on post operative pain in Adult Pulpotomy in lower first permanent molar diagnosed with symptomatic irreversible pulpitis (IP). The patients documented their levels of postoperative pain at the sixth hour, first day, and eighth day. Pain was scored on a Visual Analog Scale (VAS), with scores spanning from 0 mm (no pain-free) to 100 mm (highest level of pain).

Results

The least mean pain value was recorded in (Diode laser) group, with no statistically significant difference between both concentrations of NaOCl (2.5% and 5%) groups.

Conclusion

Modern disinfection modalities like Diode laser device, when used as hemostatic agent in pulpotomy of mature molar teeth with IP, exhibits promising results in terms of postoperative pain.

Keywords: Hemostasis, diode laser, pain, sodium hypochlorite

6th World Congress on
Dentistry and Oral Health
July 09-10, 2026 | Frankfurt, Germany

Biography:

I am an Associate Professor in the field of endodontics, passionate about combining clinical practice with research innovation; with particular interests in regenerative endodontics and novel therapeutic strategies for hard tissue repair.

I was a member in two Dental Projects Team at the National Research Centre in Egypt from (2016-2019) and from (2019-2022).