

Treatment of Intrabony Defects with Enamel Matrix Derivative (EMD) and Bovine Hydroxyapatite/Collagen Block (BHC)

I. Nedelkovska¹, E. Grbovik², I. Kovacevska³, M. Ivanovska Stojanoska⁴, S. Spasovski⁵, B. Rusevska⁴, E. Stefanovska⁶

¹Faculty of Medical Science - University "Goce Delcev" Stip, Department of Periodontology and Oral Pathology USKC "Sv.Pantelejmon" Skopje, Skopje, North Macedonia, The Republic of, ²Faculty of Dentistry - University "St.Kiril and Metodi" Skopje, Department of Endodontics USKC "Sv.Pantelejmon" Skopje, Skopje, North Macedonia, The Republic of, ³Faculty of Medical Science - University "Goce Delcev" Stip, Department of Endodontics - Faculty of Medical Science - University "Goce Delcev" Stip, Stip, North Macedonia, The Republic of, ⁴Faculty of Dentistry - University "St.Kiril and Metodi" Skopje, Department of Periodontology and Oral Pathology USKC "Sv.Pantelejmon" Skopje, Skopje, North Macedonia, The Republic of, ⁵Faculty of Dentistry - University "St.Kiril and Metodi" Skopje, Department of Oral Surgery and Implantology, Skopje, North Macedonia, The Republic of, ⁶Faculty of dentistry-University "St.Kiril and Metodi" Skopje, Department of Periodontology and Oral Pathology USKC "Sv.Pantelejmon" Skopje, Skopje, North Macedonia, The Republic of

Presentation Type

Preferred presentation type: E-Poster presentation (either E-Poster Discussion or E-Poster only)

General data

Topic: A5: Periodontal therapy – step 3: periodontal surgery (access, resective, regenerative)

Abstract text

Background: Periodontal regeneration is an efficacious predictable procedure for the treatment of isolated and multiple intrabony defects. The use of modern biomaterials for guided tissue regeneration (GTR) proves to be a much better and effective method in stimulating the regenerative potential of the bone tissue. The aim of present case report was to analyse clinical and radiographic parameters the use of EMD with BHC for the treatment of periodontal intrabony defects.

Description of the procedure: A 52-year-old male patient came to the Department of Periodontology and oral pathology with the chief complaint of bleeding gums. A generalized form of periodontitis has been clinically noted and radiographically verified. Intrabony vertical defects in teeth #23, #22 #21 were present. Pocket probing depth was >6mm. Phase 1 therapy was initiated and the patient was advised to rinse with 0.12% chlorohexidin twice daily for 14 days. After the administration of local anesthesia, papilla preservation flap was reflected and thorough debridement of the defect was evaluated, ultrasonic and graceys curettes for root scaling were used. EMD and Collagen Block was condensed into the intrabony defect with respect to # 23 and #22. Flap was approximated and sutured with 4-0 assucryl lactin sutures.

Outcomes: The patient was recalled after 14 days for suture removal. Pocket probing depth (PPD), horizontal furcation defect (HFD), and BOP were recorded after 6 months. Healing at the surgical site occurred uneventfully without any complications. There was reduction in all the clinical parameters along with evidence of radiographic bone fill at the end of 6 months.

Conclusions: From a clinical and radiographic point of view at 6 months after surgery, the use of EMD with Collagen block as grafting material seems to be an effective modality of regenerative treatment for periodontal intrabony defects.

Disclosure

Conflict of interest to declare?: No

General

1. I understand that if this abstract is accepted, EuroPerio11 will hold the copyright Yes

2. I have received the permission of all authors to sign and provide a copyright transfer agreement which transfers copyright to the EFP: Yes

3. By submitting an abstract on this web site, you represent that you own or otherwise have rights to the written summaries of research or observations ("Abstract") provided by you to EuroPerio11 (hereafter EP11), utilizing this site: Yes

4. In case of unsuccessfully applying for oral presentation, I will accept a poster presentation Yes

5. I affirm that if this abstract is accepted as a Poster presentation, it will be submitted and presented as an e-poster following the general rules of electronic poster format preparation: Yes

6. I affirm that if this abstract is accepted for Poster or Oral presentation, at least one of the authors will register for EuroPerio11 in Copenhagen by the given deadline (January 31, 2025): Yes

7. For clinical studies and animal studies, I certify that the study has been approved by an appropriate Institutional Research Board/ Research Ethics Committee: Yes

8. This abstract contains work that is original and has not been previously published in a journal Yes

9. I affirm that I will also present my abstract if the session is arranged in a hybrid format Yes