



# Treatment of intrabony defects with Enamel matrix derivative(EMD) and bovine hydroxyapatite/collagen block (BHC)



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**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 anaesthesia, papilla preservation flap was reflected and thorough debridement of the defect was evaluated, ultrasonic and gracey's 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 assecryl 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.

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