国際セッションポスター

（ポスター会場）

5月15日（金）	ポスター準備	8：30～10：00
	ポスター展示	10：00～16：40
	ポスター討論	16：40～17：30
	ポスター撤去	17：30～18：00

IP-01
2504

Effects of full-mouth debridement with azithromycin administrated systemically after conventional partial-mouth debridement: Case series study

Ryusuke Yamaguchi

Keywords: full mouth debridement, azithromycine, partial mouth debridement, full mouth disinfection, full mouth scaling and root planing, debridement, scaling and root plaining, disinfection

Aim: Although full mouth debridement with azithromycin administrated systemically (A-FM-D) is effective for periodontitis, it may lead to overuse of the antibiotic and lack of opportunity to motivate a patient due to a short therapeutic period. Therefore, this study aimed to evaluate whether A-FM-D could improve the residual periodontal disease after conventional partial-mouth consecutive debridement (PM-D).

Methods: A-FM-D was performed after periodontal initial treatment including plaque control and PM-D, for 11 patients with moderate to severe aggressive or chronic periodontitis. Seven patients had PM-Ds (1PM-D) once and four patients had twice (2PM-D) at each sector. Probing pocket depth (PPD), clinical attachment level (CAL), full mouth bleeding score (FMBS) and full-mouth plaque score (FMPS) were examined. Subgingival biofilm was obtained and analyzed by PCR Invader method.

Results: In 1 PM-D group, PPDs of base line, PM-D and A-FM-D were 3.8, 3.2, and 2.7mm, CALs were 4.2, 3.8 and 3.6mm, FMBSs were 65, 27 and10%, and FMPSs were 75, 54 and 31%, respectively. In 2 PM-D group, PPDs of base line, 1st time of PM-D, 2nd time of PM-D and A-FM-D were 4.8, 3.7, 3.6 and 2.8mm, CALs were 5.3, 4.9, 4.9 and 4.3mm, FMBSs were 84, 45, 41 and 22%, and FMPSs were 76, 51, 49 and 49%, respectively. The total and periodontal pathogenic bacteria were decreased after A-FM-D.

Conclusion: A-FM-D improved the clinical parameters even after once or twice of PM-D, suggesting that full mouth debridement with the azithromycin following the conventional debridement could be effective and a unique strategy of periodontal treatment.

IP-02
2504

Four-week histologic evaluation of grafted calvarial defects with adjunctive hyperbaric oxygen therapy in rats

Hye-yoon Chang

Key words: bone substitute, biphasic calcium phosphate, EGCG, BMP-2, hyperbaric oxygen therapy

Purpose: The aim of this study was to evaluate the healing in grafted calvarial defects of rats after adjunctive hyperbaric oxygen therapy.

Materials & Methods: 28 Sprague-Dawley rats (4 weeks old, male) were enrolled in the study. They were divided into the group (n=14) with hyperbaric oxygen therapy (HBO) and the group (n=14) without HBO (NHBO). Each group had two subgroups which were Biphasic Calcium Phosphate (BCP) and surface-modified BCP (mBCP) subgroup according to applied bone substitutes. For mBCP subgroup, BCP coated with Escherichia coli-derived recombinant human bone morphogenetic protein-2 (ErhBMP-2) and epigallocatechin-3-gallate (EGCG) were applied. Two symmetrical circular defects (6-mm diameter) were created in the right and left parietal bones of each animal. One defect was left without application of any bone substitute for a control group and the other defect was filled with the BCP or mBCP. After 4 weeks of healing, the rats were sacrificed. During the 4 weeks of healing, each animal in HBO group got HBO therapy 5 times a week. The specimens were harvested for histologic and histomorphometric analysis.

Results: Complete defect closure was not found in any of defects. More new bone formation were found in BCP or mBCP group than control. More new bone formation, residual graft resorption, and blood vessel were found in HBO group than NHBO group irrespective of bone substitute applied. More new bone formation was found in mBCP group than BCP group irrespective of HBO therapy. Less fibrous tissue was found in BCP group.

Conclusion: Within the limitations of this study, HBO had beneficial effects on bone formation in 4-week group.