Objective: A randomized, single-blinded case-controlled trial to evaluate the effect of a Chinese herbal medicine (HM) as adjunct of scaling and root planing (SRP) in aggressive periodontitis (AgP) patients. Methods: 25 generalized AgP patients (8M, 17F) aged 18 to 38 yrs agreed to participate in this study. Subjects were generally healthy, non-smokers, had no periodontal treatment before. Each patient had at least 3 teeth in each quadrant with PD $\geq 5$mm$+\text{CAL} \geq 3$mm. From each patient 5-6 most severely diseased tooth sites were monitored throughout the study. Periodontal parameters including probing depth (PD) and clinical attachment loss (AL) using Florida Probe, bleeding index (BI), and GCF volume were recorded at baseline and 3, 6, 9, 12 months after treatment. Alveolar bone was analyzed by digital subtraction radiography (DSR) at baseline and 6, 12 months. All subjects received thorough full mouth SRP. Then, were randomly assigned to test group (13 patients, 72 sites) and control group (12 patients, 68 sites). Group-T orally took a marketed HM named BUSHEN GUCHIWAN (4.0g, bid) for three months. Group-C took no medicine. During each recall visit both groups received OHI and prophylaxis and clinical parameters recorded.

Results: 20 patients attended 6-month recall. 13 patients completed 12-month survey. Both groups showed significant improvement in all parameters after treatment at all visits. However, group-T showed additional improvements. At 6-month, PD reduced 3.05mm in group-T compared to 2.65mm in group-C; AL improved 1.49mm and 0.87mm, respectively; GCF reduced 0.44µl in group-T vs 0.34µl in group-C; BI decreased 1.68 and 1.34, respectively. The inter-group differences in clinical data peaked at 6-month (P<0.01). DSR analysis showed the increased bone density in group-T was 4.91±3.23 vs 3.01±2.59 in group-C (P<0.05) at 6-month and continued growing until 12-month (6.27±3.20 vs 4.04±1.98, P<0.01). Conclusion: The "Bushen Guchiwan" may contribute to the adjunct effect of SRP for aggressive periodontitis patients.