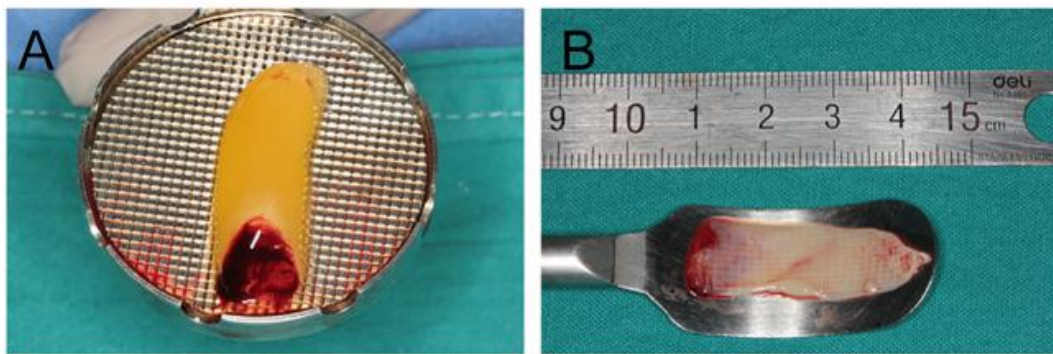


Title: Effects of Concentrated Growth Factor on Gingival Thickness in Periodontal Accelerated Osteogenic Orthodontics: A 6-month Randomized Controlled Trial

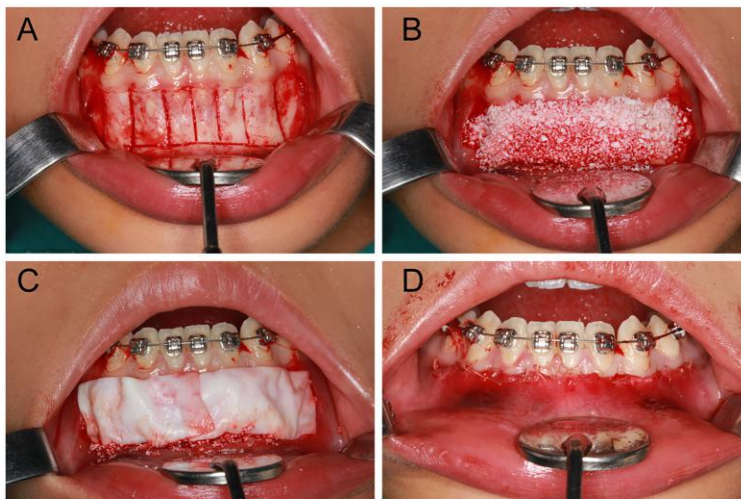
Authors: Lei Qi*, Weiwen Ge*, Ningning Cao, Shoupeng Wang, Yifeng Qian, Xudong Wang, Lei Zhang

Supplementary Figure 1 CGF membrane preparation.



A: The CGF fibrin block was squeezed with a special box. B: CGF membrane and its length.

Supplementary Figure 2 The process of PAOO in control group.



A: Flap design. B: Decortication and bone graft. C: Covering Bio-gide membrane. D: Close the incision.

Supplementary Figure 3

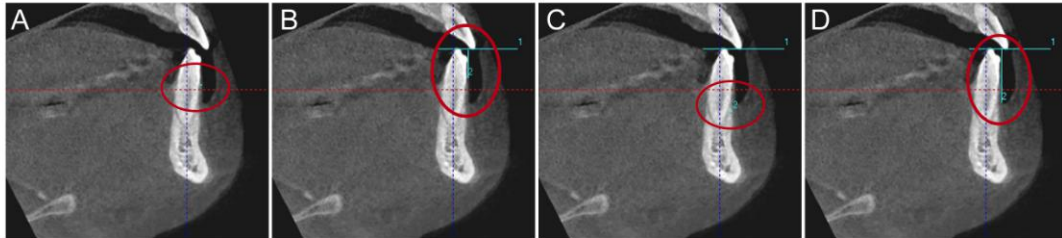
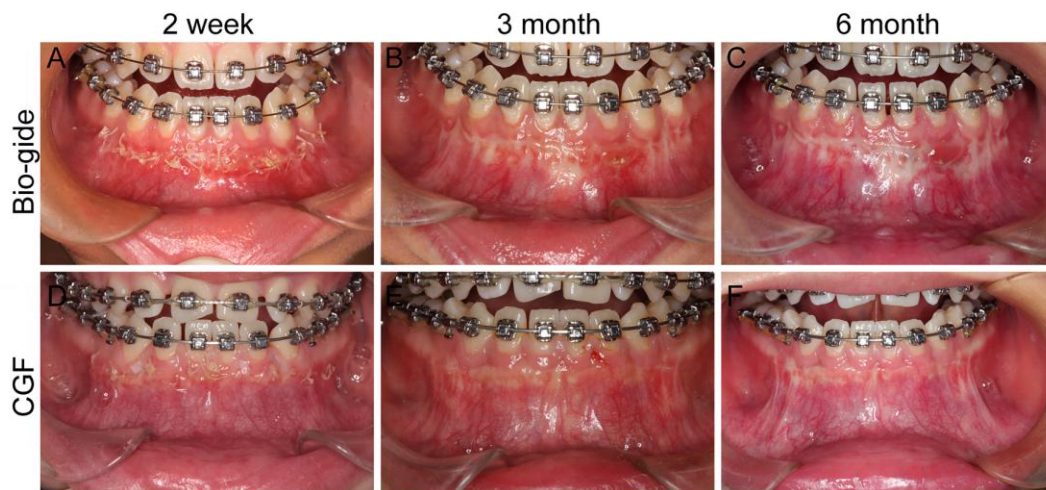


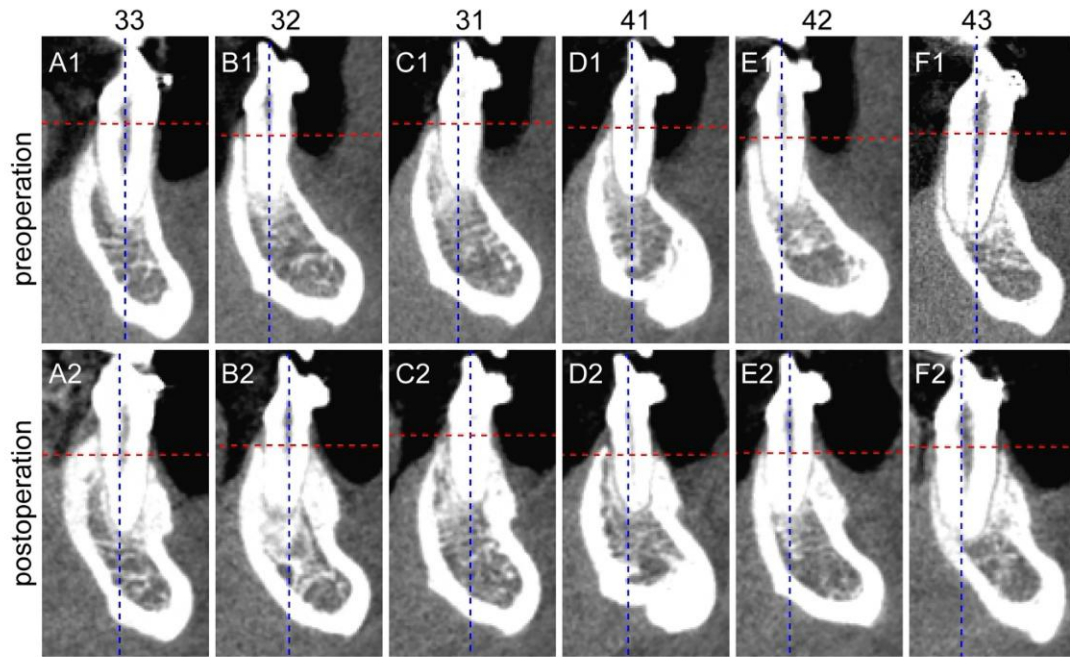
Illustration showing how the gingival thickness (GT), gingival margin height (GH), buccal alveolar bone thickness (BT), and buccal alveolar bone height (BH) were measured on CBCT images. Red circle: the region of measurement.

Supplementary Figure 4 The images of follow-up.



A, D: 2 weeks post-operative images; B, E: 3 months post-operative images; C, F: 6 months post-operative images.

Supplementary Figure 5



The measurements of CBCT images of central incisors, lateral incisors and canine teeth at t_0 (before durgery) and t_1 (6 months after surgery) in the control group. 43, 33: canine teeth; 42,32: lateral incisors; 41,31: central incisors.

Supplementary Table 1 Postoperative pain, swelling and healing evaluations

	Control group	Test group	<i>p</i> ^a
Pain			
2 weeks	2.15±0.67 (1.00-3.00)	1.80±0.52 (1.00-3.00)	0.024*
3 months	0.00±0.00 (0.00-0.00)	0.00±0.00 (0.00-0.00)	1.000
6 months	0.00±0.00 (0.00-0.00)	0.00±0.00 (0.00-0.00)	1.000
<i>p</i> ^b	0.000**	0.000**	
Swelling			
2 weeks	1.60±0.68 (1.00-3.00)	1.55±0.69 (1.00-3.00)	0.786
3 months	0.00±0.00 (0.00-0.00)	0.00±0.00 (0.00-0.00)	1.000
6 months	0.00±0.00 (0.00-0.00)	0.00±0.00 (0.00-0.00)	1.000
<i>p</i> ^b	0.000**	0.000**	
HI			
2 weeks	3.00±0.73 (2.00-4.00)	2.95±0.69 (2.00-4.00)	0.824
3 months	4.55±0.51 (4.00-5.00)	4.65±0.49 (4.00-5.00)	0.524
6 months	5.00±0.00 (5.00-5.00)	5.00±0.00 (5.00-5.00)	1.000
<i>p</i> ^b	0.000**	0.000**	

Data are expressed as the mean±standard deviation (minimum-maximum)

HI, healing index;

a Mann Whitney U Test, statistically different between groups (***p*<0.01, **p*<0.05).

b Friedman Test, significantly different compared with baseline (***p*<0.01, **p*<0.05).