

Figure S1. Experimental protocol. Rats were divided into three experimental groups. Each group consisted of two rats (n=2). PBS group, the silk ligature wire was immersed in PBS as a control; CA group, the silk ligature wire was immersed in 1% carrageenan; CA/RP group, the silk ligature wire was immersed in 1% carrageenan and 10 $\mu\text{g}/\text{ml}$ ropinirole. CA, carrageenan; RP, ropinirole; PBS, phosphate buffered saline.

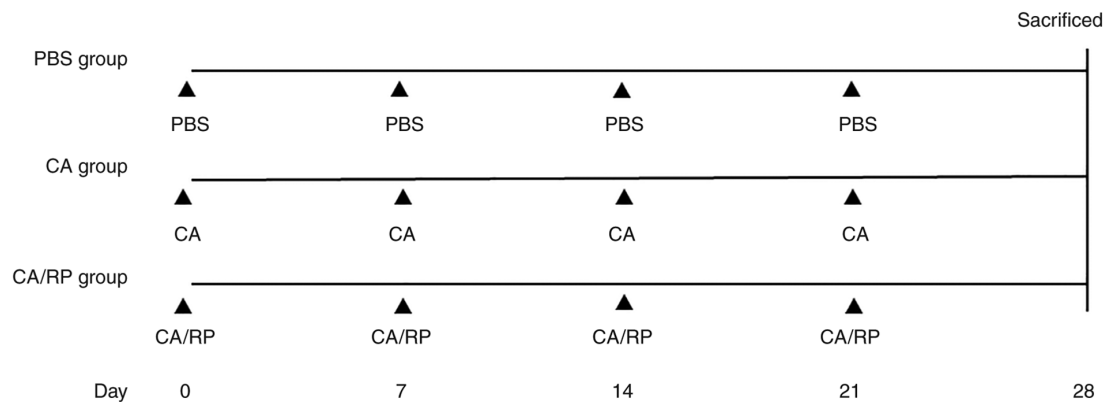


Figure S2. Three-dimensional micro-CT images. CA, carrageenan; RP, ropinirole; PBS, phosphate buffered saline.

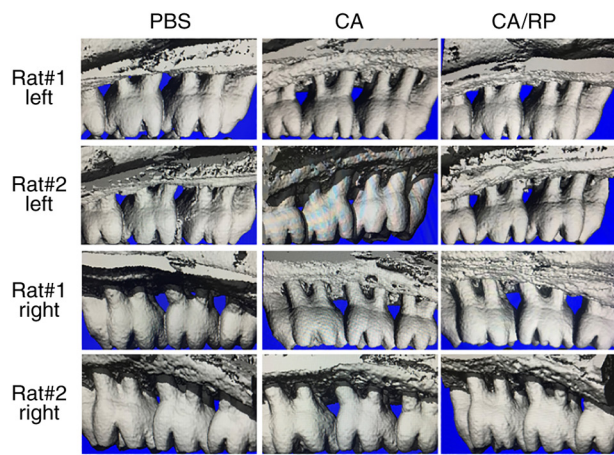


Figure S3. Method for the measurement of the perpendicular distance. After making three-dimensional images, the alveolar bone loss was measured as the length from the connective line between the cemento-enamel junction (red line) and the alveolar margin (arrows) on the palatal side of the maxillary second molar.

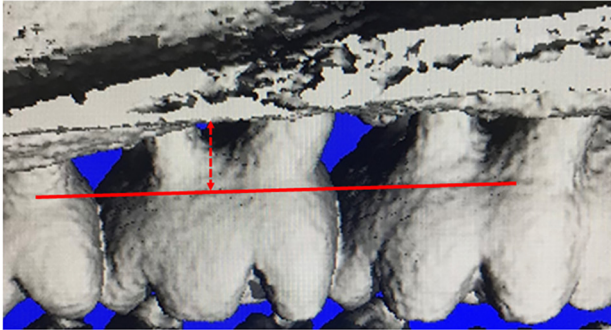


Figure S4. Scheme of carrageenan modulation CXCL1 via IL-17RA. CXCL1, C-X-C motif chemokine ligand 1; IL, interleukin; RA receptor A.

