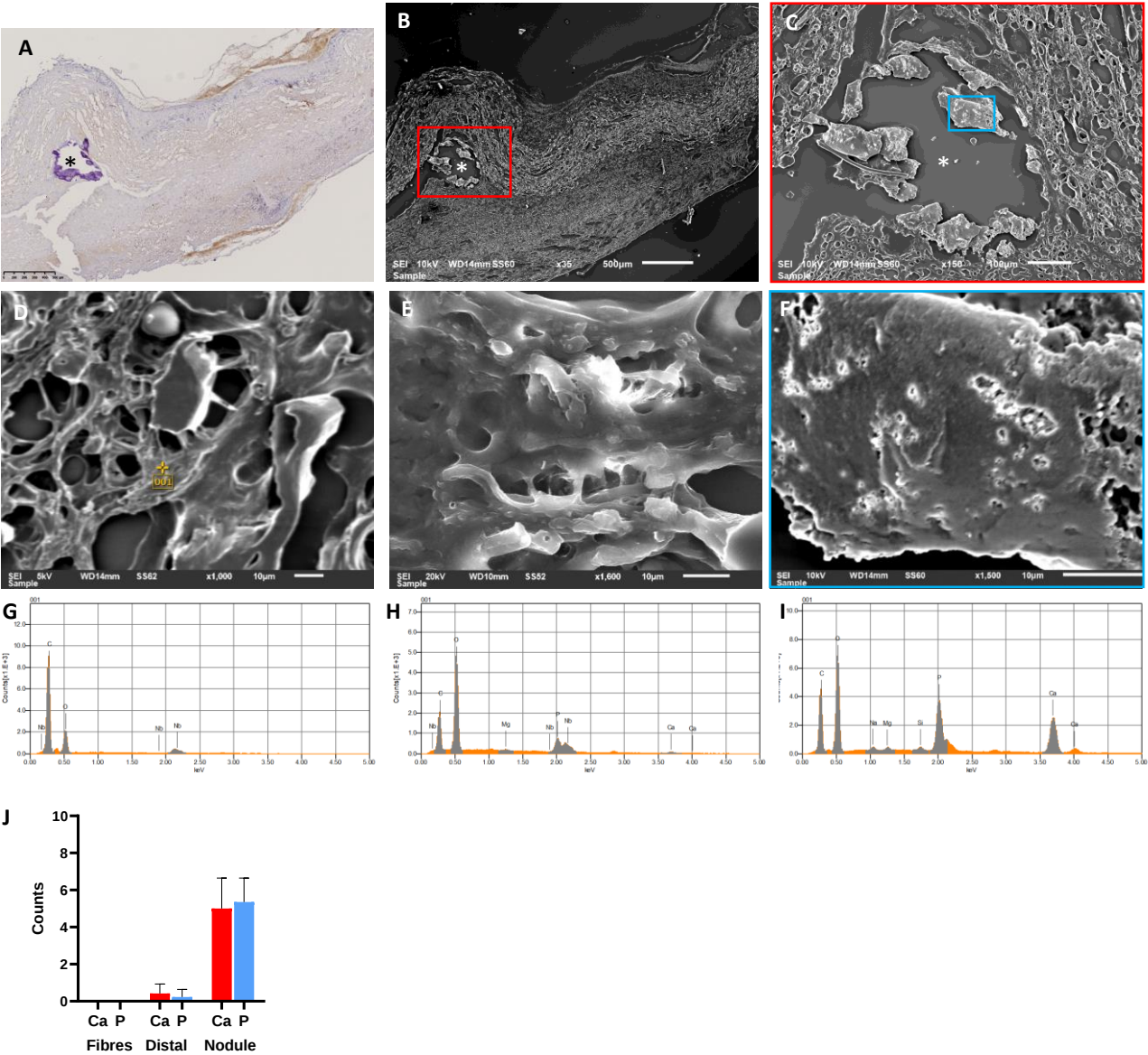


Supplementary Fig. 3



One cusp showed one nodule of calcification (*) in the middle of one leaflet (A-C, F). Light microscopy image of nodule (A), SEM of same nodule (B) with magnified image (C) and high magnification of calcified material (F). SEM of nanofibers away (D) and close to nodule (E). Representative energy dispersive X-ray analysis of region in panel D showed no signals for calcium or phosphorus in the nanofibrous area (G), of region in panel E showed mean counts of 0.42 ± SD 0.51 and counts of 0.233 ± SD 0.40 for calcium (3.69 KeV) and phosphorus (2.01 KeV) respectively (H) and region in panel F showed mean counts of 5.00 ± SD 1.28 and 5.35 ± 1.28 for calcium and phosphorus within the nodule (I). Quantification of the amount of calcium (Ca) and phosphorus (P) in the nanofibers (Fibres) in the sinus wall, distal to the nodule in the leaflet (Distal) and the calcified nodule (Nodule) (J). Scale bars are on each panel (A-F).