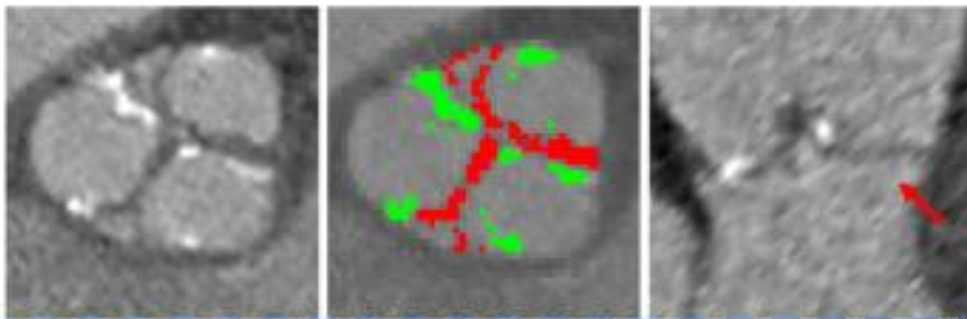
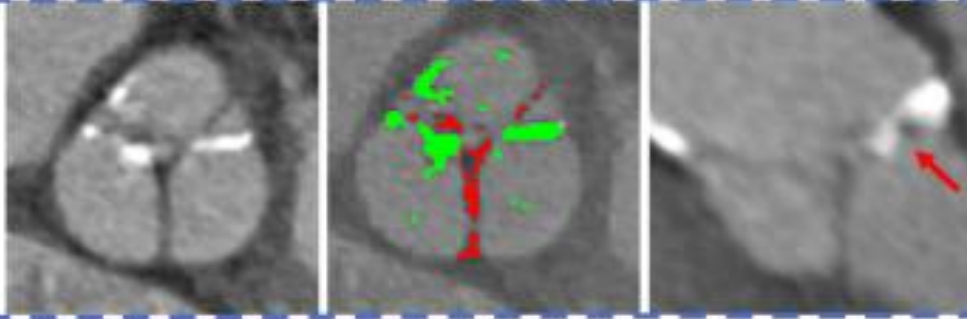
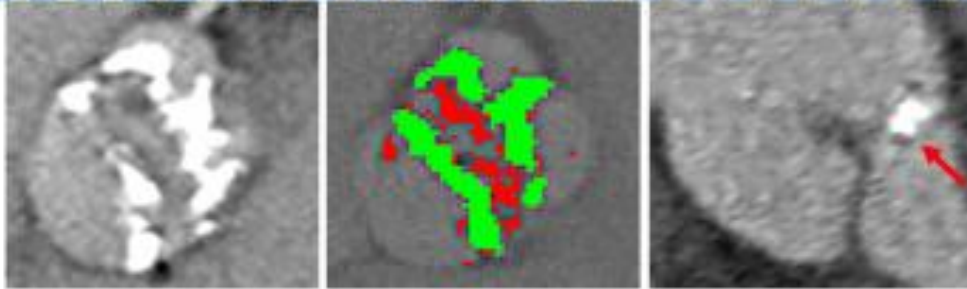


1

Fibro-Calcific Volume 172 mm³/cm²
 Fibro-Calcific Ratio 2.09
 Vmax 3.87 m/s

**2**

Fibro-Calcific Volume 325 mm³/cm²
 Fibro-Calcific Ratio 0.04
 Vmax 3.53 m/s

**3**

Fibro-Calcific Volume 630 mm³/cm²
 Fibro-Calcific Ratio 0.57
 Vmax 4.87 m/s



Contrast-enhanced CT and histology.

Case 1: A tricuspid aortic valve from a woman with a large amount of fibrosis (red) compared with calcification (green) on CT. Histology confirms a preponderance of fibrosis in the valve consistent with the CT findings. There was no clear evidence of valve thrombosis or lipid infiltration. Red arrow denotes the leaflet corresponding to histology. Time from CT to surgery: 15 days. Masson's trichrome staining: blue sections represent collagen; red/purple represents calcium.

Case 2: A tricuspid aortic valve from a man with a small amount of fibrosis compared with calcification (from the three CT slices containing the aortic valve this one was the only one with significant fibrosis). This was again confirmed on histological analysis of the valve leaflet. Red arrow denotes the leaflet corresponding to histology. Time from CT to surgery: 15 days. Verhoeff-van Gieson staining: black represents elastic fibres, pink collagen fibres and yellow calcium.

Case 3: A bicuspid aortic valve from a man with extensive fibrosis and calcification in the valve. Findings were again confirmed on histology with the spatial distribution of calcium and fibrosis on histology appearing similar to the calcific and non-calcific leaflet thickening on CT (Verhoeff-van Gieson staining). Red arrow denotes the leaflet corresponding to histology. Time from CT to surgery: 21 days.