

Tough and injectable fiber reinforced calcium phosphate cement as an alternative to polymethylmethacrylate cement for vertebral augmentation: a biomechanical study

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Supplemental Information

Table S1 - Semi-quantitative scoring system used to evaluate the cohesion of the CPC formulations

| GRADE | PARTICULATE CLOUD FORMATION |
|-------|---|
| 1 | Virtually no particulate cloud formation |
| 2 | Minimal particulate cloud formation upon injection into aqueous environment |
| 3 | Visible particulate cloud formation in the vicinity of the injected CPC |
| 4 | Large particulate cloud formation that spreads over the majority of the liquid volume |
| 5 | Virtually no cohesion present, with near total disintegration of CPC |

| GRADE | FRAGMENTATION |
|-------|---|
| 1 | A continuous tube of CPC is extruded |
| 2 | CPC tube remains almost continuous with an average tube length > 5 cm |
| 3 | CPC tube fractures in several points with an average tube length of 3 cm |
| 4 | Prevalence of fracture points in CPC tube is frequent with the average tube length < 1 cm |
| 5 | Virtually no cohesive properties present, with total disintegration of CPC |

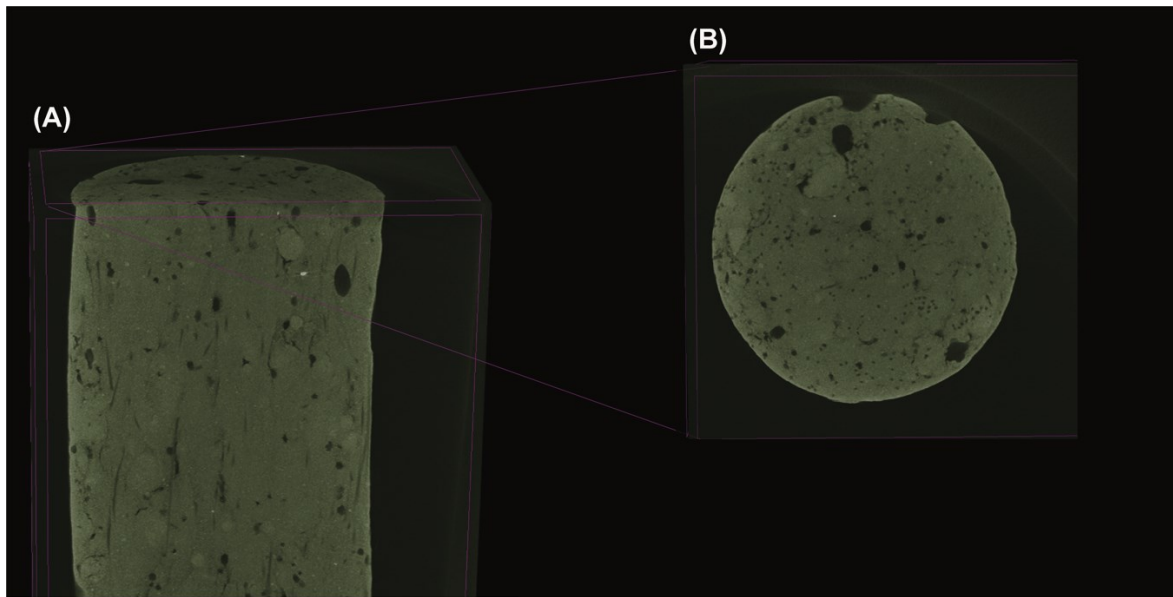


Figure S1. Micro-CT images of extruded cement paste in a (A) a lateral view and (B) a top view.