Comparative bone regeneration study of hardystonite and hydroxyapatite as filler in critical sized defect of rat calvaria

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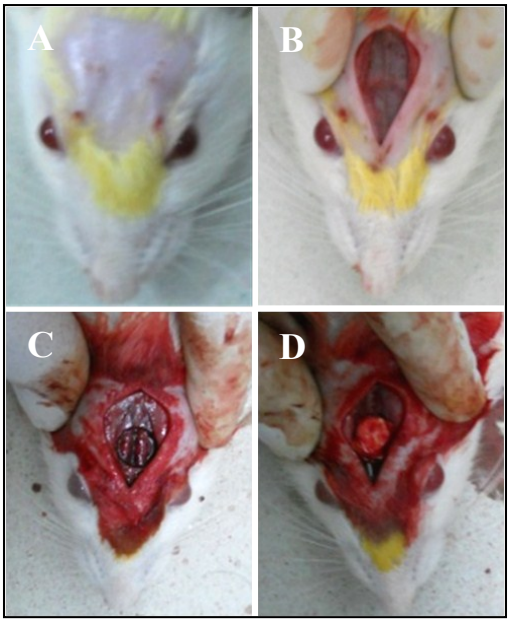
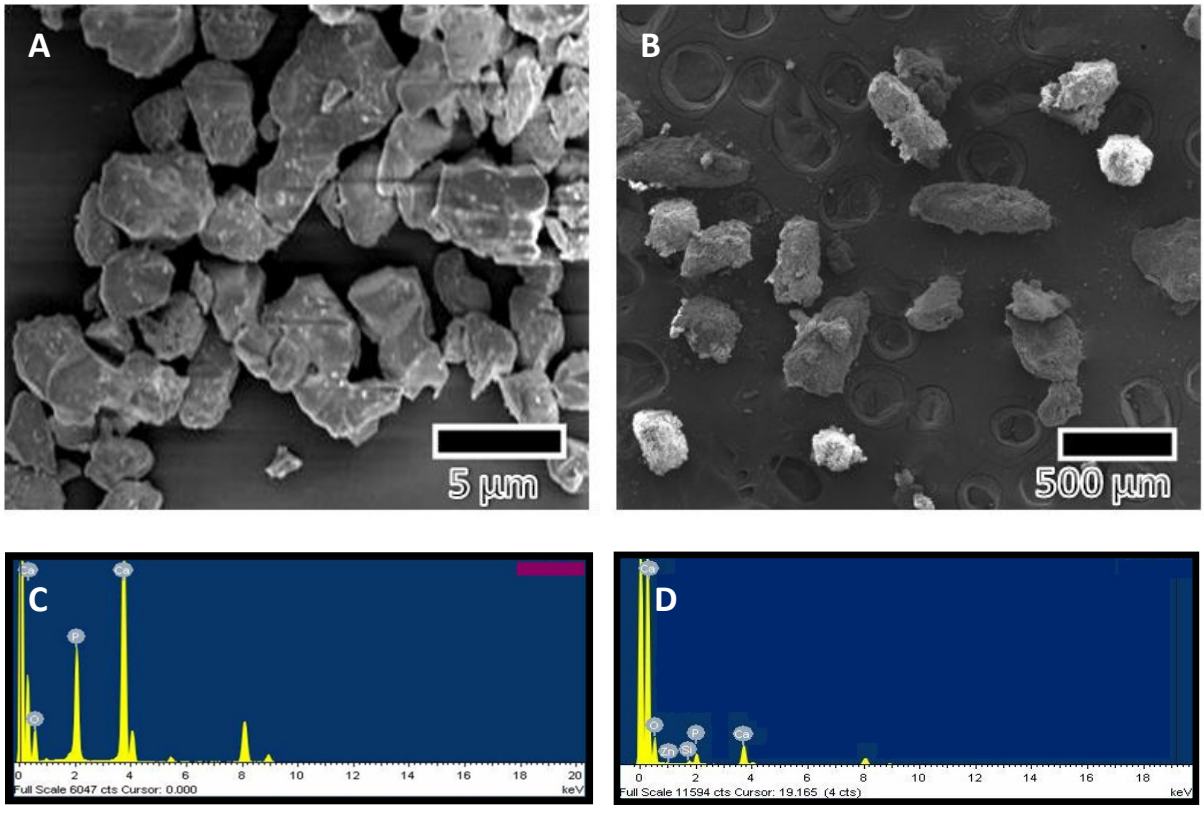


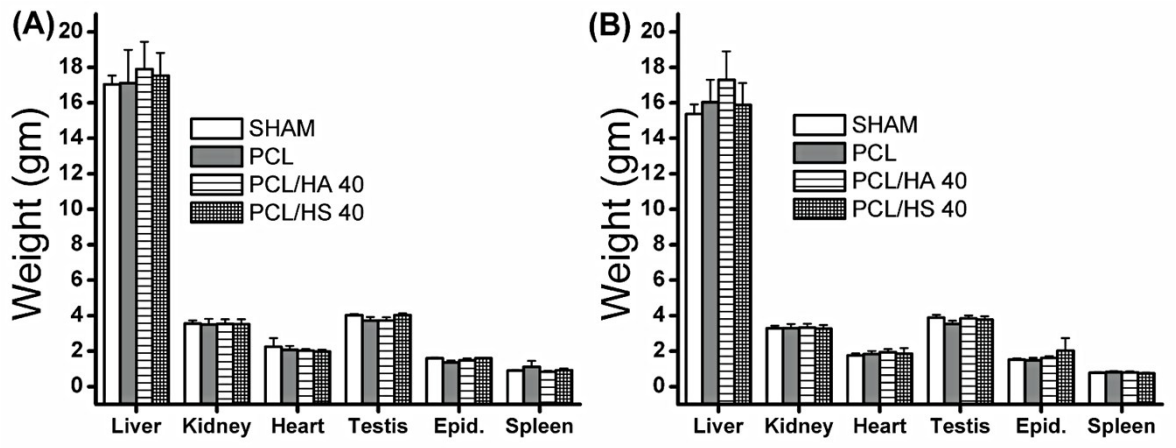
Supplementary Figure 1: Surgical process of the rat: A-Shaved head of the rat, B-Incision at the cranial site, C-8 mm critical sized defect and D- Scaffold at the defect site.



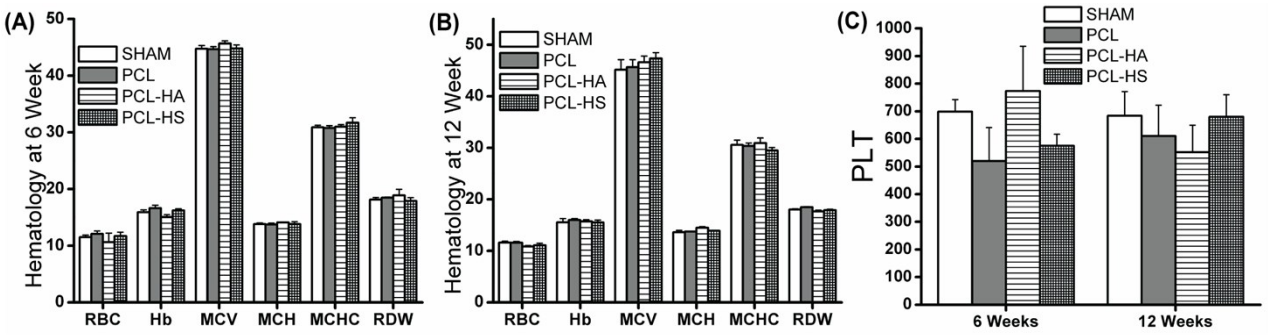
Supplementary Figure 2: SEM micro graphs with EDAX of the HA and HS particle used for preparing the electrospinning solution where image A & C is of HA particle with EDAX, B & D HS particle with EDAX

Supplementary Table 1: Micro CT parameter values at 6 and 12 Week timepoint of various groups

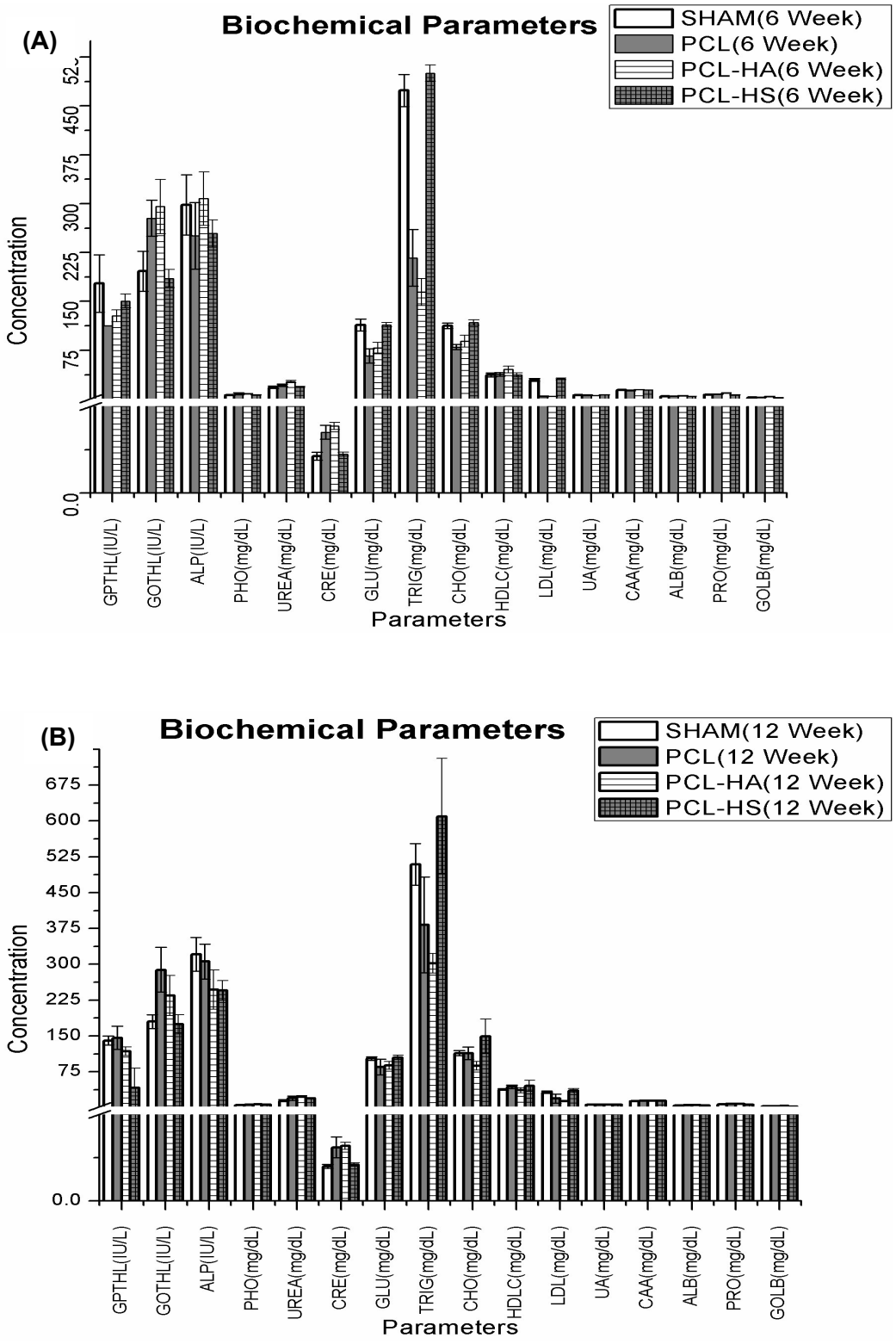
Micro CT Parameter	Time-point	Groups				
		SHAM	PCL	PCL-HA	PCL-HS	Native bone
BVF	6 Week	2.18±0.28	5.55±0.37	4.34±0.66	5.50±1.48	32.41±1.81
	12 Week	4.06±0.68	4.87±0.95	9.00±2.62	10.60±1.07	32.41±1.81
BMD	6 Week	18.53±1.83	28.52±9.21	28.13±9.64	51.07±16.90	321.65±30.73
	12 Week	35.79±6.44	34.93±8.04	69.32±26.47	74.72±23.82	321.65±30.73
TMC	6 Week	1.87±0.18	2.84±0.93	2.84±0.97	5.16±1.71	32.50±3.10
	12 Week	3.61±0.65	3.56±0.80	7.0±2.67	7.55±2.41	32.50±3.10
TMD	6 Week	867±30	509±153	607±172	877±41	1022±788
	12 Week	852±62	787±193	829±48	740±284	788±100



Supplementary Figure 3: Individual organ weight at 6 Weeks (A) and 12 Weeks (B). There was no significant difference in any of the organ weights between all SHAM, PCL, PCL-HA, PCL-HS groups at both timepoints



Supplementary Figure 4: Individual hematology parameters at 6 Weeks (A), 12 Weeks (B) and Platelets, PLT (C). There was no significant difference in any of the parameters between SHAM, PCL, PCL-HA and PCL-HS groups at both timepoints.



Supplementary Figure 5: Individual serum biochemistry parameters at 6 Weeks (A), 12 Weeks (B). There was no significant difference in any of the parameters between SHAM, PCL, PCL-HA and PCL-HS groups at both timepoints.