

S-Table I.
Cell Shape

Tendon	Group	Region	2 weeks (mm/mm)	4 weeks (mm/mm)	8 weeks (mm/mm)
Biceps	SD	INS	0.754 ± 0.09	0.685 ± 0.08	0.623 ± 0.05
	OV		0.752 ± 0.06	0.720 ± 0.05	0.658 ± 0.06
	SD + OV		0.739 ± 0.07	0.689 ± 0.10	0.671 ± 0.07
	SD	INTRA	0.689 ± 0.04	0.689 ± 0.08	0.598 ± 0.10
	OV		0.718 ± 0.06	0.612 ± 0.05	0.601 ± 0.08
	SD + OV		0.698 ± 0.06	0.663 ± 0.05	0.631 ± 0.04
	SD	PROX	0.598 ± 0.04	0.645 ± 0.08	0.609 ± 0.11
	OV		0.638 ± 0.07	0.582 ± 0.06	0.530 ± 0.08
	SD + OV		0.661 ± 0.05	0.558 ± 0.05	0.490 ± 0.03
	SD	DIS	0.494 ± 0.06	0.577 ± 0.04	0.556 ± 0.14
	OV		0.488 ± 0.14	0.520 ± 0.09	0.475 ± 0.13
	SD + OV		0.519 ± 0.14	0.336 ± 0.03***	0.410 ± 0.16
Supra	SD	INS	0.695 ± 0.04	0.646 ± 0.09	0.650 ± 0.03
	OV		0.715 ± 0.03	0.702 ± 0.10	0.596 ± 0.08
	SD + OV		0.682 ± 0.02	0.697 ± 0.08	0.640 ± 0.06
	SD	MID	0.662 ± 0.03	0.502 ± 0.06	0.402 ± 0.07
	OV		0.621 ± 0.03	0.487 ± 0.06	0.538 ± 0.04
	SD + OV		0.576 ± 0.06	0.529 ± 0.11	0.579 ± 0.05*

S-Table I. At 4 weeks, cell shape was significantly less rounded at the biceps distal groove (DIS) in the SD + OV group compared to SD and OV. At 8 weeks, cell shape was significantly more rounded at the supraspinatus mid-substance (MID) in the SD + OV group compared to SD. Data is shown as mean ± standard deviation (p<0.025 (SD vs. SD + OV*, OV vs. SD + OV**)). (SD=scapular dyskinesis, OV=overuse)

S-Table II.
Cell Density

Tendon	Group	Region	2 weeks (cells/mm²)	4 weeks (cells/mm²)	8 weeks (cells/mm²)
Biceps	SD	INS	300 ± 53	184 ± 94	276 ± 52
	OV		252 ± 37	363 ± 119	437 ± 126
	SD + OV		272 ± 46	262 ± 50	463 ± 305
	SD	INTRA	331 ± 108	328 ± 64	255 ± 27
	OV		309 ± 110	396 ± 114	322 ± 104
	SD + OV		364 ± 89	327 ± 123	306 ± 104
	SD	PROX	426 ± 181	295 ± 65	321 ± 130
	OV		336 ± 99	331 ± 118	352 ± 24
	SD + OV		272 ± 42	440 ± 220	434 ± 126
	SD	DIS	351 ± 199	327 ± 89	334 ± 152
	OV		327 ± 133	474 ± 90	338 ± 131
	SD + OV		402 ± 119	335 ± 42	358 ± 41
Supra	SD	INS	448 ± 306	387 ± 59	461 ± 87
	OV		433 ± 260	308 ± 52	230 ± 83
	SD + OV		597 ± 278	299 ± 74	419 ± 75**
	SD	MID	282 ± 121	431 ± 113	594 ± 23
	OV		393 ± 151	444 ± 181	428 ± 105
	SD + OV		450 ± 81	388 ± 81	806 ± 665

S-Table II. At 8 weeks, cell density was significantly increased at the supraspinatus insertion (INS) in the SD + OV group compared OV. ($p < 0.025$ (OV vs. SD + OV**)) (SD=scapular dyskinesis, OV=overuse)