

Appendix S2: Studies that depicted different symptoms on rectus diastasis (KQ 4)

Table S1. Body image

Author (ref. n ^a)	Year	Participants	Measurement	Timing	Variable	Outcome	Conclusion	Notes
Keshawani (39)	2018	32	>2 fingers & ultrasound	3 weeks postpartum	Multidimensional Body-Self Relations Questionnaire	Body image R=-0.44, p=0.006	p=0.006	All 32 had DRA
Gitta (40)	2016	200	Calliper		Quality of life	DRA less quality	p=0.017	SF36
Bellido (41)	2015	21	>2 fingers & ultrasound	12 months postpartum	Final aesthetic result	VAS for scar , 2,8 preoperative -> 8,3 ;12 months postop.	p<0.001	
Olsson (42)	2019	60	CT postoperative	Preoperative with trunk instability and resistant to training and at 12 months	QoL by SF36	Significant improvement on all subscales	p<0.001	Subscale bodily pain higher than general population

Table S2. Core instability

Author(ref nº)	Year	Participants	Measurement	Timing	Variable	Outcome	Conclusion	Notes
Hills (43)	2018	40	>2 fingers & ultrasound	12 months postpartum	Difference in Trunk Torque and Endurance	DRA vs no-DRA, Women with DRA demonstrated lower trunk muscle rotation torque when compared to no-DRA	p=0.004	Trunk Rotation torque was the only test that was found to be statistically different between the 2 cohorts
					Dynamic movements against gravity	Women with DRA achieved lower scores on the Sit-up test, compared to no-DRA	p=0.066	
Gunnarson (44)	2015	57	Clinical and by CT	During DRA surgery	Width and Biodex scores	Intraoperative ARD correlated strongly with Biodex measurements during flexion (p = 0.007, R = -0.35) and isometric work load (p = 0.01, R = -0.34).	p=0.007 / p=0.01	No correlation between muscle strength and BMI, waistline, or DRA above umbilicus
Liaw (45)	2011	60	Ultrasound measurement	40 postpartum from 7 weeks to 6 months versus 20	manual muscle testing and curl-ups	strength and static endurance of muscles improved over time	p<0.05 / p=0.040 / p<0.01	

				nullipara		(P<.05). DRA changes correlated with improvement in trunk flexion strength (Spearman rho = 0.38, P = .040). All measurements were less than nulliparous females (all P<.001).		
Olsson (42)	2019	60	CT postoperative	Preoperative with trunk instability and resistant to training and at 12 months	Abdominal Trunk Function Protocol (disability rating index + 8 trunk function tests	76% better performances (significant for DRI and 5 out of 8 physiological tests	p<0.001	Full description per activity in report

Table S3. Pain

Author(Ref .no)	Year	Participants	Measurement	Timing	Variable	Outcome	Conclusion	Notes
Goncalves (46)	2015	84	Ultrasound, >16mm	gestational week 35 and 6-8, 12-14, and 24-26 weeks postpartum	VDS pain no/moderate/severe	DRA 27.3% vs no-DRA 27.5%	p=0.986	6 months postpartum, moderate or severe pain
Keshawani (39)	2018	32	>2 fingers & ultrasound	3 weeks postpartum	VAS 100mm last 24hrs for abdominal pain / lumbar pain, pelvic pain	Abd pain R-.45, p=0.005 Lumbar pain not sign Pelvic pain not sign	p=0.005	All 32 had DRA. Abdominal Pain was relatively mild in the study sample, the correlation should be interpreted
Spitznagle (48)	2017	541	>0.5 fingerbreadths	Cross sectional	Myofascial pain	DRA 32.7% vs no-DRA 29.1%	p>0.05	Medical charts review
Sperstad (20)	2017	300	>2 fingers	21 weeks gestation; post-partum: 6 weeks, 6 months & 12	Lumbopelvic pain	DRA 45.6% vs no-DRA 32.5%	p=0.10	12-months

				months				
					Low back pain only	DRA 38.6% vs no-DRA 27.5	p=0.17	12-months
					Pelvic girdle pain only	DRA 15.8% vs no-DRA 4.2%	p=0.82	12-months
Parker (51)	2009	100	Calliper, > 2 cm	39 patients within a lumbar/pelvic pain care pathway, 53 control, 8 after laparoscopy	Low back pain	No significant difference		
					Abdominal and pelvic pain	DRA more pain	p=0.023	No significances with lower width
Gitta (40)	2016	200	Calliper		Low back pain	DRA more pain	p=0.039	
Doubkova (47)	2018	109	Calliper	55 with and 54 without chronic low back pain	chronic low back pain	Interrelated	p?	Possible mediated by BMI
Bellido (41)	2015	21	>2 fingers & ultrasound	12 months post-partum	VAS score chronic low back pain	Average back pain was 4.3 preoperative -> 2.2; 12 months postop.	p<0.001	

Table S4. Pelvic problems

Author(Ref. nº)	Year	Participants	Measurement	Timing	Variable	Outcome	Conclusion	Notes
Bo (49)	2017	300	>2 fingers	21 weeks gestation; post-partum: 6 weeks, 6 months & 12 months	Urinary incontinence	DRA 36.8% vs no-DRA 41.7%	p=0.654	12-months / ICIQUI-SF
					Stress urinary incontinence	DRA 22.8% vs no-DRA 36.7%	p=0.095	12-months / ICIQUI-SF
					Urgency urinary incontinence	DRA 17.5% vs no-DRA 9.2%	p=0.173	12-months / ICIQUI-SF
					Mixed urinary incontinence	DRA 5.3% vs no-DRA 6.7%	p=0.977	12-months / ICIQUI-SF
					POP-Q stage II	DRA 1.7% vs no-DRA 2.5%	p=1.000	12-months / Pelvic Organ Prolapse Quantification System (POP-Q)
Keshawani (39)	2018	32	>2 fingers & ultrasound	3 weeks postpartum	short form Pelvic Floor Distress Inventory and the short form Pelvic	Urogynaecological complaints not sign		All 32 had DRA

					Floor Impact Questionnaire			
Wang (50)	2019	310	>2 fingers	6-8 week postpartum	Urinary incontinence	DRA 10.2% vs no-DRA 6.4%	p=0.239	
					POP-Q stage II	DRA 13.9% vs no-DRA 13.4%	p=0.911	
Spitznagle (48)	2017	541	>0.5 fingerbreadths	Cross sectional	Stress incontinence	DRA 47.7% vs no-DRA 41.5%	p>0.05	Medical charts review
					Fecal incontinence	DRA 6.8% vs no-DRA 2.8%	p<0.05	
					POP	DRA 18.7% vs no-DRA 9.4%	p<0.001	
Gitta (40)	2016	200	Calliper		Urinary incontinence	DRA more incontinence	p=0.028	ICIQUI-SF
Olsson (42)	2019	60	CT postoperative	Preoperative with trunk instability and resistant to training and at 12 months	Urinary incontinence by UDI-6	Significant improvement	p=0.001	
					Urinary incontinence by IIQ-7	Significant improvement	p=0.002	