

Rectal Sensory-Motor Alterations: A Clinical Perspective on Anorectal Disorders

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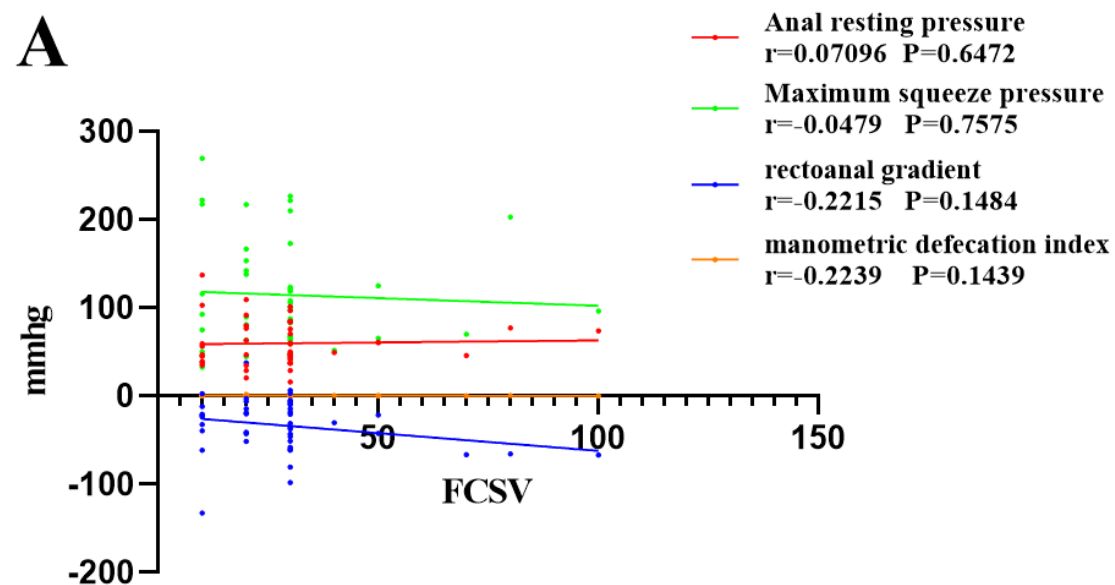
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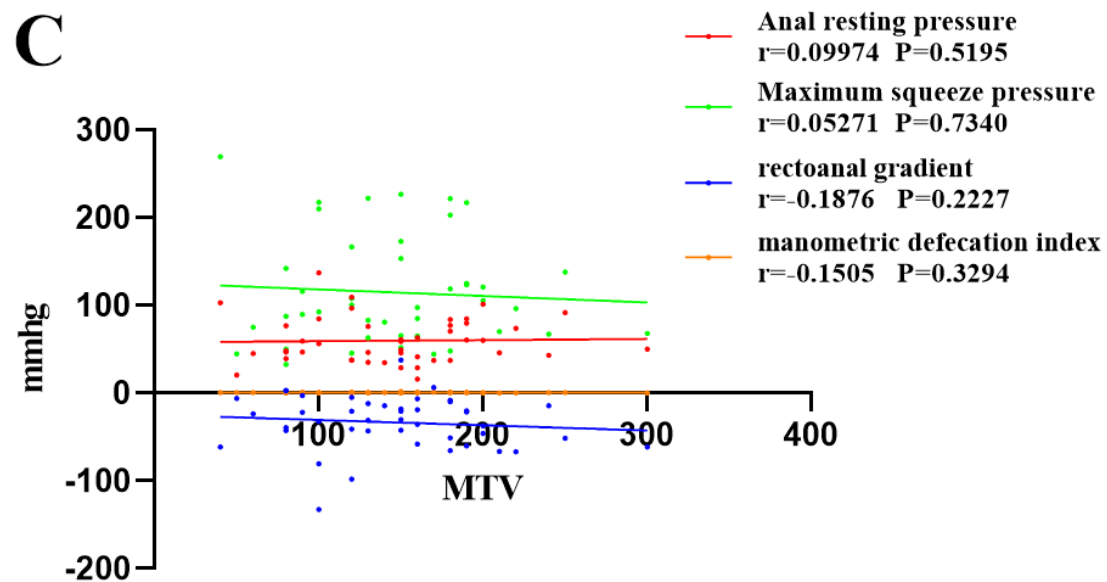
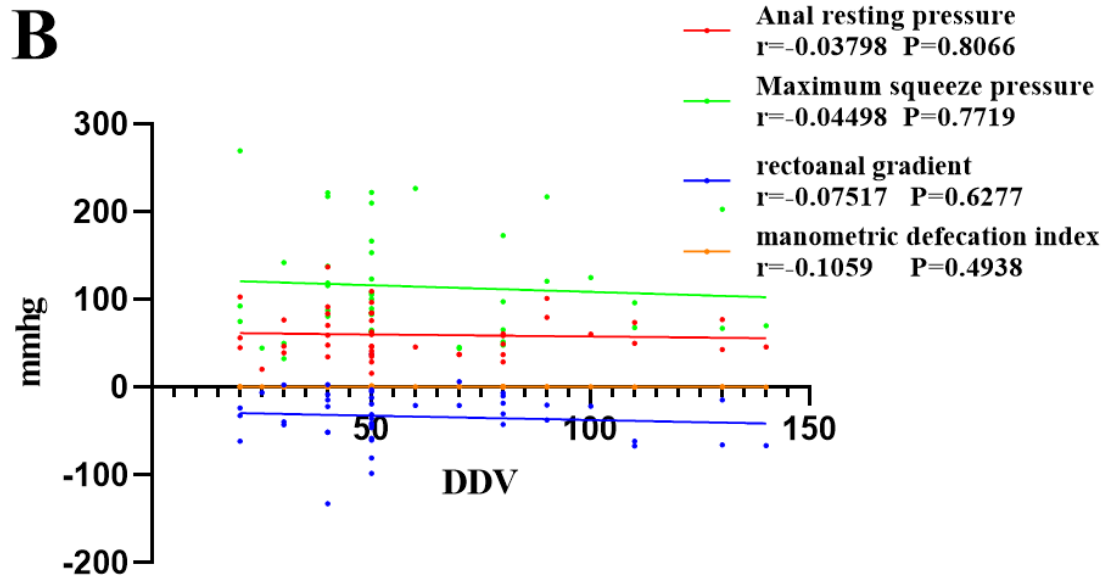
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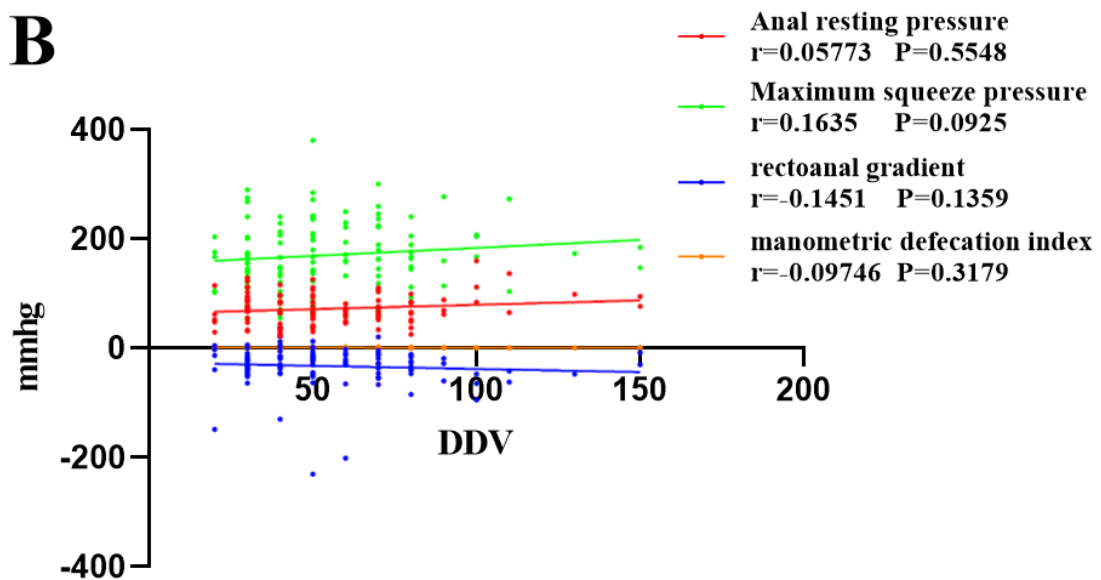
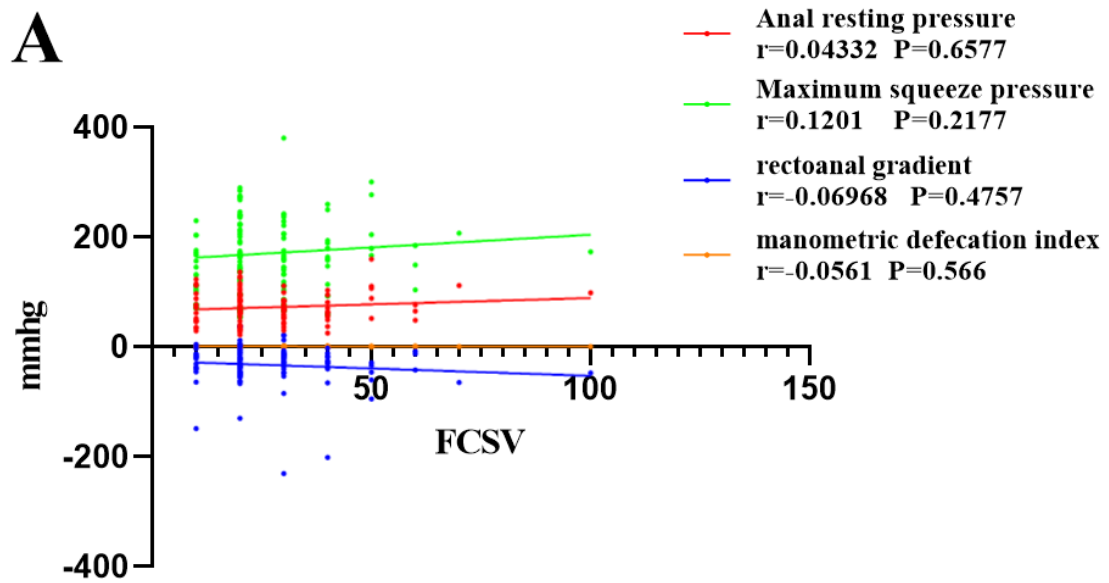
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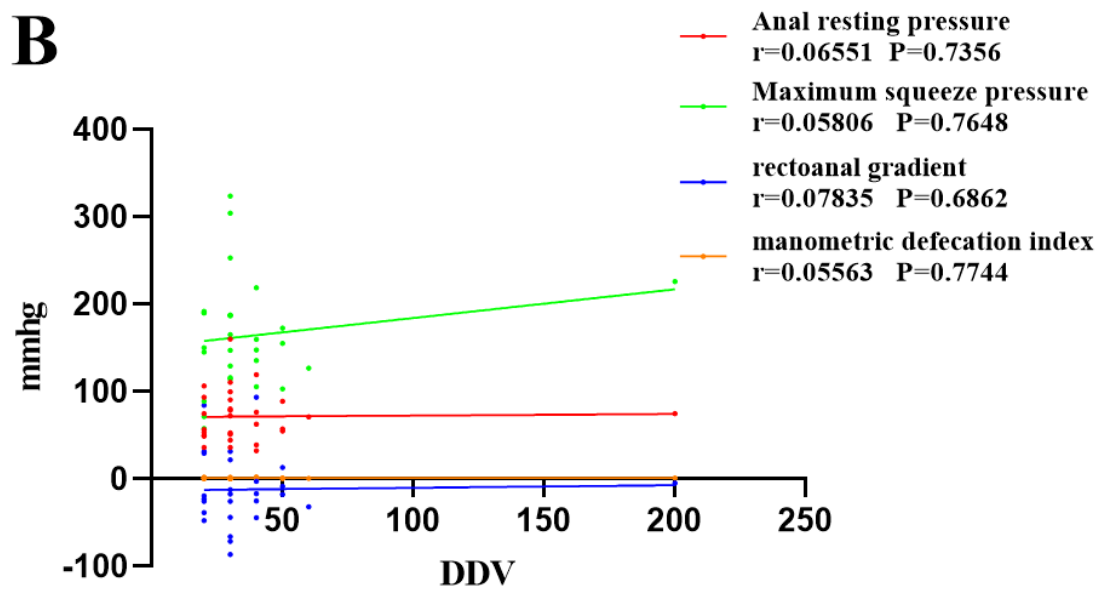
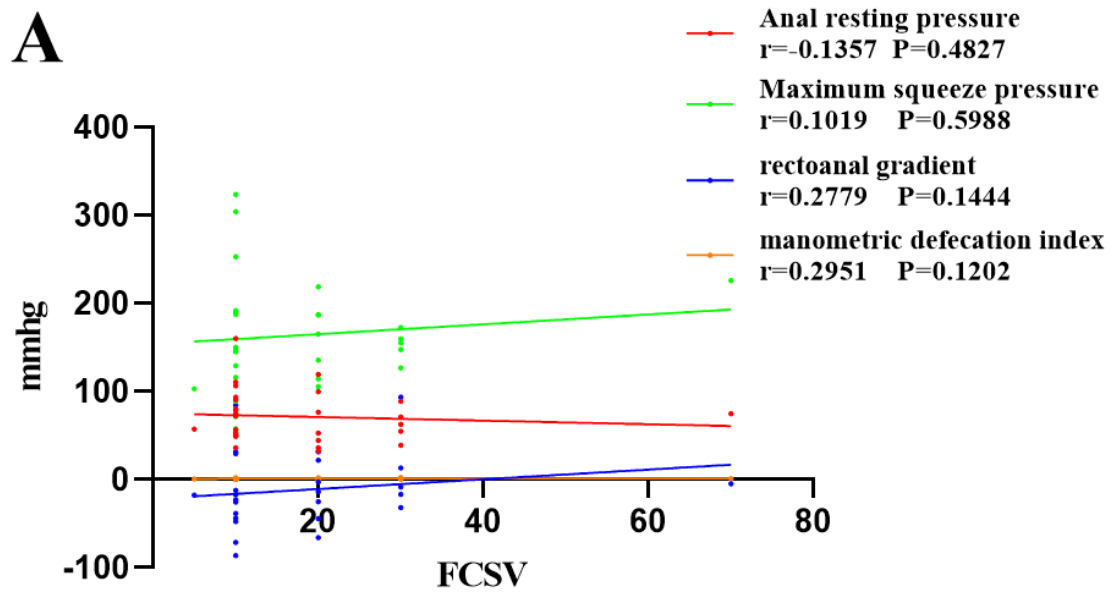




(A) Correlation between FCSV and rectal motility in patients with FI. (B) Correlation between DDV and rectal motility in patients with FI. (C) Correlation between MTV and rectal motility in patients with FI.



(A) Correlation between FCSV and rectal motility in patients with rectal cancer. (B) Correlation between DDV and rectal motility in patients with rectal cancer.



(A) Correlation between FCSV and rectal motility in postoperative patients with rectal cancer. (B) Correlation between DDV and rectal motility in postoperative patients with rectal cancer.

Regression analysis to determine if age and gender affect the correlation between FCSV and maximum rectal squeeze pressure.

Correlation	A FCSV vs. maximum squeezing pressure	Correlation	A FCSV vs. maximum squeezing pressure	Correlation	A FCSV vs. maximum squeezing pressure
Spearman r		Spearman r		Spearman r	
r	0.09469	r	0.1485	r	0.1217
95% confidence interval	-0.2668 to 0.4328	95% confidence interval	-0.1846 to 0.4510	95% confidence interval	-0.03478 to 0.2723
P value		P value		P value	
P (two-tailed)	0.6002	P (two-tailed)	0.3670	P (two-tailed)	0.1161
P value summary	ns	P value summary	ns	P value summary	ns
Exact or approximate P value	Approximate	Exact or approximate P value	Approximate	Exact or approximate P value	Approximate
Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No
Number of XY Pairs	33	Number of XY Pairs	39	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

Correlation	A FCSV vs. maximum squeezing pressure	Correlation	A FCSV vs. maximum squeezing pressure	Correlation	A FCSV vs. maximum squeezing pressure
Spearman r		Spearman r		Spearman r	
r	-0.007435	r	0.09914	r	0.1264
95% confidence interval	-0.1964 to 0.1820	95% confidence interval	-0.04966 to 0.2436	95% confidence interval	-0.005733 to 0.2541
P value		P value		P value	
P (two-tailed)	0.9374	P (two-tailed)	0.1782	P (two-tailed)	0.0536
P value summary	ns	P value summary	ns	P value summary	ns
Exact or approximate P value	Approximate	Exact or approximate P value	Approximate	Exact or approximate P value	Approximate
Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No
Number of XY Pairs	114	Number of XY Pairs	186	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between FCSV and rectoanal gradient.

Correlation	A FCSV vs. rectoanal gradient	Correlation	A FCSV vs. rectoanal gradient	Correlation	A FCSV vs. rectoanal gradient
Spearman r		Spearman r		Spearman r	
r	-0.006519	r	-0.08788	r	-0.1250
95% confidence interval	-0.3583 to 0.3469	95% confidence interval	-0.4006 to 0.2432	95% confidence interval	-0.2754 to 0.03147
P value		P value		P value	
P (two-tailed)	0.9713	P (two-tailed)	0.5948	P (two-tailed)	0.1065
P value summary	ns	P value summary	ns	P value summary	ns
Exact or approximate P value	Approximate	Exact or approximate P value	Approximate	Exact or approximate P value	Approximate
Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	No
Number of XY Pairs	33	Number of XY Pairs	39	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

Correlation	A FCSV vs. rectoanal gradient	Correlation	A FCSV vs. rectoanal gradient	Correlation	A FCSV vs. rectoanal gradient
Spearman r		Spearman r		Spearman r	
r	-0.1639	r	-0.2576	r	-0.2033
95% confidence interval	-0.3425 to 0.02611	95% confidence interval	-0.3908 to -0.1139	95% confidence interval	-0.3266 to -0.07332
P value		P value		P value	
P (two-tailed)	0.0814	P (two-tailed)	0.0004	P (two-tailed)	0.0018
P value summary	ns	P value summary	***	P value summary	**
Exact or approximate P value	Approximate	Exact or approximate P value	Approximate	Exact or approximate P value	Approximate
Significant? (alpha = 0.05)	No	Significant? (alpha = 0.05)	Yes	Significant? (alpha = 0.05)	Yes
Number of XY Pairs	114	Number of XY Pairs	186	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between FCSV and manometric defecation index.

	Correlation	A FCSV vs. manometric defecation index		Correlation	A FCSV vs. manometric defecation index		Correlation	A FCSV vs. manometric defecation index
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.1333	2	r	-0.1080	2	r	-0.1233
3	95% confidence interval	-0.4641 to 0.2301	3	95% confidence interval	-0.4176 to 0.2240	3	95% confidence interval	-0.2739 to 0.03315
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.4596	6	P (two-tailed)	0.5127	6	P (two-tailed)	0.1113
7	P value summary	ns	7	P value summary	ns	7	P value summary	ns
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

	Correlation	A FCSV vs. manometric defecation index		Correlation	A FCSV vs. manometric defecation index		Correlation	A FCSV vs. manometric defecation index
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.2019	2	r	-0.2097	2	r	-0.1721
3	95% confidence interval	-0.3768 to -0.01322	3	95% confidence interval	-0.3470 to -0.06359	3	95% confidence interval	-0.2974 to -0.04105
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.0312	6	P (two-tailed)	0.0041	6	P (two-tailed)	0.0083
7	P value summary	*	7	P value summary	**	7	P value summary	**
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	Yes	9	Significant? (alpha = 0.05)	Yes	9	Significant? (alpha = 0.05)	Yes
10			10			10		
11	Number of XY Pairs	114	11	Number of XY Pairs	186	11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between DDV and maximum rectal squeeze pressure.

	Correlation	A DDV vs. maximum squeezing pressure		Correlation	A DDV vs. maximum squeezing pressure		Correlation	A DDV vs. maximum squeezing pressure
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.0003418	2	r	0.08369	2	r	0.1287
3	95% confidence interval	-0.3529 to 0.3523	3	95% confidence interval	-0.2472 to 0.3971	3	95% confidence interval	-0.02766 to 0.2789
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.9985	6	P (two-tailed)	0.6125	6	P (two-tailed)	0.0964
7	P value summary	ns	7	P value summary	ns	7	P value summary	ns
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

	Correlation	A DDV vs. maximum squeezing pressure		Correlation	A DDV vs. maximum squeezing pressure		Correlation	A DDV vs. maximum squeezing pressure
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	0.02802	2	r	0.1693	2	r	0.08819
3	95% confidence interval	-0.1621 to 0.2161	3	95% confidence interval	0.02175 to 0.3096	3	95% confidence interval	-0.04432 to 0.2177
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.7673	6	P (two-tailed)	0.0209	6	P (two-tailed)	0.1788
7	P value summary	ns	7	P value summary	*	7	P value summary	ns
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	Yes	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	114	11	Number of XY Pairs	186	11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between DDV and rectoanal gradient.

Correlation		A DDV vs. rectoanal gradient	Correlation		A DDV vs. rectoanal gradient	Correlation		A DDV vs. rectoanal gradient
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.1417	2	r	-0.2731	2	r	-0.08379
3	95% confidence interval	-0.4708 to 0.2220	3	95% confidence interval	-0.5487 to 0.05602	3	95% confidence interval	-0.2365 to 0.07298
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.4316	6	P (two-tailed)	0.0925	6	P (two-tailed)	0.2802
7	P value summary	ns	7	P value summary	ns	7	P value summary	ns
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Correlation		A DDV vs. rectoanal gradient
1	Spearman r	
2	r	-0.1503
3	95% confidence interval	-0.3301 to 0.04006
4		
5	P value	
6	P (two-tailed)	0.1104
7	P value summary	ns
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No
10		
11	Number of XY Pairs	114

Male middle-aged group

Correlation		A DDV vs. rectoanal gradient
1	Spearman r	
2	r	-0.2081
3	95% confidence interval	-0.3455 to -0.06191
4		
5	P value	
6	P (two-tailed)	0.0044
7	P value summary	**
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	Yes
10		
11	Number of XY Pairs	186

Male elderly group

Correlation		A DDV vs. rectoanal gradient
1	Spearman r	
2	r	-0.1419
3	95% confidence interval	-0.2689 to -0.01013
4		
5	P value	
6	P (two-tailed)	0.0300
7	P value summary	*
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	Yes
10		
11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between DDV and manometric defecation index.

Correlation		A DDV vs. manometric defecation index	Correlation		A DDV vs. manometric defecation index	Correlation		A DDV vs. manometric defecation index
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.1911	2	r	-0.2913	2	r	-0.07999
3	95% confidence interval	-0.5094 to 0.1732	3	95% confidence interval	-0.5624 to 0.03631	3	95% confidence interval	-0.2329 to 0.07678
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	0.2868	6	P (two-tailed)	0.0720	6	P (two-tailed)	0.3027
7	P value summary	ns	7	P value summary	ns	7	P value summary	ns
8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Correlation		A DDV vs. manometric defecation index
1	Spearman r	
2	r	-0.1810
3	95% confidence interval	-0.3580 to 0.008466
4		
5	P value	
6	P (two-tailed)	0.0539
7	P value summary	ns
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No
10		
11	Number of XY Pairs	114

Male middle-aged group

Correlation		A DDV vs. manometric defecation index
1	Spearman r	
2	r	-0.1743
3	95% confidence interval	-0.3143 to -0.02696
4		
5	P value	
6	P (two-tailed)	0.0173
7	P value summary	*
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	Yes
10		
11	Number of XY Pairs	186

Male elderly group

Correlation		A DDV vs. manometric defecation index
1	Spearman r	
2	r	-0.1282
3	95% confidence interval	-0.2559 to 0.003813
4		
5	P value	
6	P (two-tailed)	0.0501
7	P value summary	ns
8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No
10		
11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between MTV and maximum rectal squeeze pressure.

Correlation		A MTV vs. maximum squeezing pressure	Correlation		A MTV vs. maximum squeezing pressure	Correlation		A MTV vs. maximum squeezing pressure
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.01176	2	r	-0.06994	2	r	0.2097
3	95% confidence interval	-0.3629 to 0.3423	3	95% confidence interval	-0.3854 to 0.2601	3	95% confidence interval	0.05573 to 0.3540
4	P value		4	P value		4	P value	
5	P (two-tailed)	0.9482	5	P (two-tailed)	0.6722	5	P (two-tailed)	0.0064
6	P value summary	ns	6	P value summary	ns	6	P value summary	**
7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate
8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	Yes
9			9			9		
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

Correlation		A MTV vs. maximum squeezing pressure	Correlation		A MTV vs. maximum squeezing pressure	Correlation		A MTV vs. maximum squeezing pressure
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	0.1773	2	r	0.1030	2	r	0.06688
3	95% confidence interval	-0.01234 to 0.3546	3	95% confidence interval	-0.04574 to 0.2473	3	95% confidence interval	-0.06569 to 0.1971
4	P value		4	P value		4	P value	
5	P (two-tailed)	0.0591	5	P (two-tailed)	0.1617	5	P (two-tailed)	0.3083
6	P value summary	ns	6	P value summary	ns	6	P value summary	ns
7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate
8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No
9			9			9		
10			10			10		
11	Number of XY Pairs	114	11	Number of XY Pairs	186	11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between MTV and rectoanal gradient.

Correlation		A MTV vs. rectoanal gradient	Correlation		A MTV vs. rectoanal gradient	Correlation		A gradient vs. rectoanal gradient
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	0.05024	2	r	-0.1266	2	r	-0.1427
3	95% confidence interval	-0.3078 to 0.3958	3	95% confidence interval	-0.4330 to 0.2060	3	95% confidence interval	-0.2920 to 0.01342
4	P value		4	P value		4	P value	
5	P (two-tailed)	0.7813	5	P (two-tailed)	0.4424	5	P (two-tailed)	0.0650
6	P value summary	ns	6	P value summary	ns	6	P value summary	ns
7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate
8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No
9			9			9		
10			10			10		
11	Number of XY Pairs	33	11	Number of XY Pairs	39	11	Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

Correlation		A MTV vs. rectoanal gradient	Correlation		A MTV vs. rectoanal gradient	Correlation		A MTV vs. rectoanal gradient
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.1876	2	r	-0.1431	2	r	-0.06580
3	95% confidence interval	-0.3639 to 0.001684	3	95% confidence interval	-0.2852 to 0.005030	3	95% confidence interval	-0.1961 to 0.06678
4	P value		4	P value		4	P value	
5	P (two-tailed)	0.0456	5	P (two-tailed)	0.0513	5	P (two-tailed)	0.3163
6	P value summary	*	6	P value summary	ns	6	P value summary	ns
7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate	7	Exact or approximate P value	Approximate
8	Significant? (alpha = 0.05)	Yes	8	Significant? (alpha = 0.05)	No	8	Significant? (alpha = 0.05)	No
9			9			9		
10			10			10		
11	Number of XY Pairs	114	11	Number of XY Pairs	186	11	Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis to determine if age and gender affect the correlation between MTV and manometric defecation index.

Correlation	A MTV vs. manometric defecation index	Correlation	A MTV vs. manometric defecation index	Correlation	A MTV vs. manometric defecation index
1 Spearman r		1 Spearman r		1 Spearman r	
2 r	-0.001848	2 r	-0.06464	2 r	-0.09416
3 95% confidence interval	-0.3542 to 0.3510	3 95% confidence interval	-0.3808 to 0.2651	3 95% confidence interval	-0.2464 to 0.06258
4		4		4	
5 P value		5 P value		5 P value	
6 P (two-tailed)	0.9919	6 P (two-tailed)	0.6958	6 P (two-tailed)	0.2248
7 P value summary	ns	7 P value summary	ns	7 P value summary	ns
8 Exact or approximate P value	Approximate	8 Exact or approximate P value	Approximate	8 Exact or approximate P value	Approximate
9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No
10		10		10	
11 Number of XY Pairs	33	11 Number of XY Pairs	39	11 Number of XY Pairs	168

Male youth group

Male middle-aged group

Male elderly group

Correlation	A MTV vs. manometric defecation index	Correlation	A MTV vs. manometric defecation index	Correlation	A MTV vs. manometric defecation index
1 Spearman r		1 Spearman r		1 Spearman r	
2 r	-0.1786	2 r	-0.1213	2 r	-0.06173
3 95% confidence interval	-0.3558 to 0.01098	3 95% confidence interval	-0.2647 to 0.02721	3 95% confidence interval	-0.1922 to 0.07084
4		4		4	
5 P value		5 P value		5 P value	
6 P (two-tailed)	0.0573	6 P (two-tailed)	0.0990	6 P (two-tailed)	0.3471
7 P value summary	ns	7 P value summary	ns	7 P value summary	ns
8 Exact or approximate P value	Approximate	8 Exact or approximate P value	Approximate	8 Exact or approximate P value	Approximate
9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No
10		10		10	
11 Number of XY Pairs	114	11 Number of XY Pairs	186	11 Number of XY Pairs	234

Female youth group

Female middle-aged group

Female elderly group

Regression analysis on the influence of age and gender on rectal sensation and motility in patients with rectal cancer.

Regression analysis to assess whether age and gender influence the correlation between MTV and anal resting pressure.

Correlation	A MTV vs. Anal resting pressure
1 Spearman r	
2 r	0.2665
3 95% confidence interval	0.02473 to 0.4789
4	
5 P value	
6 P (two-tailed)	0.0268
7 P value summary	*
8 Exact or approximate P value	Approximate
9 Significant? (alpha = 0.05)	Yes
10	
11 Number of XY Pairs	69

Male middle-aged group

Correlation	A MTV vs. Anal resting pressure	Correlation	A MTV vs. Anal resting pressure	Correlation	A MTV vs. Anal resting pressure
1 Spearman r		1 Spearman r		1 Spearman r	
2 r	-0.5000	2 r	-0.2740	2 r	0.2964
3 95% confidence interval		3 95% confidence interval	-0.7593 to 0.4072	3 95% confidence interval	-0.1339 to 0.6327
4		4		4	
5 P value		5 P value		5 P value	
6 P (two-tailed)	>0.9999	6 P (two-tailed)	0.4126	6 P (two-tailed)	0.1596
7 P value summary	ns	7 P value summary	ns	7 P value summary	ns
8 Exact or approximate P value	Exact	8 Exact or approximate P value	Exact	8 Exact or approximate P value	Approximate
9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No	9 Significant? (alpha = 0.05)	No
10		10		10	
11 Number of XY Pairs	3	11 Number of XY Pairs	11	11 Number of XY Pairs	24

Female youth group Female middle-aged group Female elderly group

Regression analysis to assess whether age and gender influence the correlation between MTV and rectoanal gradient.

	A
	MTV vs. rectoanal gradient
1	Spearman r
2	r
3	95% confidence interval
4	
5	P value
6	P (two-tailed)
7	P value summary
8	Exact or approximate P value
9	Significant? (alpha = 0.05)
10	
11	Number of XY Pairs

Male middle-aged group

	A		A		A
	MTV vs. rectoanal gradient		MTV vs. rectoanal gradient		MTV vs. rectoanal gradient
1	Spearman r	1	Spearman r	1	Spearman r
2	r	2	r	2	r
3	95% confidence interval	3	95% confidence interval	3	95% confidence interval
4		4		4	
5	P value	5	P value	5	P value
6	P (two-tailed)	6	P (two-tailed)	6	P (two-tailed)
7	P value summary	7	P value summary	7	P value summary
8	Exact or approximate P value	8	Exact or approximate P value	8	Exact or approximate P value
9	Significant? (alpha = 0.05)	9	Significant? (alpha = 0.05)	9	Significant? (alpha = 0.05)
10		10		10	
11	Number of XY Pairs	11	Number of XY Pairs	11	Number of XY Pairs

Female youth group Female middle-aged group Female elderly group

Regression analysis to determine if age and gender affect the correlation between MTV and manometric defecation index.

	A
	MTV vs. manometric defecation index
1	Spearman r
2	r
3	95% confidence interval
4	
5	P value
6	P (two-tailed)
7	P value summary
8	Exact or approximate P value
9	Significant? (alpha = 0.05)
10	
11	Number of XY Pairs

Male middle-aged group

Correlation		A MTV vs. manometric defecation index	Correlation		A MTV vs. manometric defecation index	Correlation		A MTV vs. manometric defecation index
1	Spearman r		1	Spearman r		1	Spearman r	
2	r	-0.5000	2	r	0.1461	2	r	-0.09459
3	95% confidence interval		3	95% confidence interval	-0.5126 to 0.6966	3	95% confidence interval	-0.4894 to 0.3323
4			4			4		
5	P value		5	P value		5	P value	
6	P (two-tailed)	>0.9999	6	P (two-tailed)	0.6668	6	P (two-tailed)	0.6602
7	P value summary	ns	7	P value summary	ns	7	P value summary	ns
8	Exact or approximate P value	Exact	8	Exact or approximate P value	Exact	8	Exact or approximate P value	Approximate
9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No	9	Significant? (alpha = 0.05)	No
10			10			10		
11	Number of XY Pairs	3	11	Number of XY Pairs	11	11	Number of XY Pairs	24

Female youth group

Female middle-aged group

Female elderly group

Regression analysis on the impact of age and gender on rectal sensation and motility in postoperative patients with rectal cancer.

Regression analysis to assess whether age and gender influence the correlation between MTV and rectoanal gradient.

Correlation		A MTV vs. rectoanal gradient
1	Spearman r	
2	r	-0.5948
3	95% confidence interval	-0.8410 to -0.1448
4		
5	P value	
6	P (two-tailed)	0.0133
7	P value summary	*
8	Exact or approximate P value	Exact
9	Significant? (alpha = 0.05)	Yes
10		
11	Number of XY Pairs	17

but

Simple linear regression Tabular results		A rectoanal gradient
1	Best-fit values	
2	Slope	-0.8583
3	Y-intercept	50.47
4	X-intercept	58.80
5	1/slope	-1.165
6		
7	Std. Error	
8	Slope	0.4104
9	Y-intercept	31.78
10		
11	95% Confidence Intervals	
12	Slope	-1.733 to 0.01651
13	Y-intercept	-17.27 to 118.2
14	X-intercept	-infinity to 89.11
15		
16	Goodness of Fit	
17	R squared	0.2257
18	Sy.x	42.55
19		
20	Is slope significantly non-zero?	
21	F	4.373
22	DFn, DFd	1, 15
23	P value	0.0539
24	Deviation from zero?	Not Significant
25		
26	Equation	$Y = -0.8583 \cdot X + 50.47$

Male middle-aged group

Correlation		A MTV vs. rectoanal gradient
1	Spearman r	
2	r	0.09639
3	95% confidence interval	
4		
5	P value	
6	P (two-tailed)	0.8288
7	P value summary	ns
8	Exact or approximate P value	Exact
9	Significant? (alpha = 0.05)	No
10		
11	Number of XY Pairs	8

Female elderly group

Regression analysis to determine if age and gender affect the correlation between MTV

and manometric defecation index.

Correlation		A
		MTV vs. manometric defecation index
1	Spearman r	
2	r	-0.6010
3	95% confidence interval	-0.8437 to -0.1542
4		
5	P value	
6	P (two-tailed)	0.0122
7	P value summary	*
8	Exact or approximate P value?	Exact
9	Significant? (alpha = 0.05)	Yes
10		
11	Number of XY Pairs	17

but

Simple linear regression		A
Tabular results		manometric defecation index
1	Best-fit values	
2	Slope	-0.01026
3	Y-intercept	1.647
4	X-intercept	160.5
5	1/slope	-97.49
6		
7	Std. Error	
8	Slope	0.004937
9	Y-intercept	0.3823
10		
11	95% Confidence Intervals	
12	Slope	-0.02078 to 0.0002658
13	Y-intercept	0.8318 to 2.461
14	X-intercept	112.6 to +infinity
15		
16	Goodness of Fit	
17	R squared	0.2235
18	Sy.x	0.5118
19		
20	Is slope significantly non-zero?	
21	F	4.316
22	DFn, DFd	1, 15
23	P value	0.0553
24	Deviation from zero?	Not Significant
25		
26	Equation	Y = -0.01026*X + 1.647

Male middle-aged group

Correlation		A
		MTV vs. manometric defecation index
1	Spearman r	
2	r	-0.01205
3	95% confidence interval	
4		
5	P value	
6	P (two-tailed)	0.9889
7	P value summary	ns
8	Exact or approximate P value?	Exact
9	Significant? (alpha = 0.05)	No
10		
11	Number of XY Pairs	8

Female elderly group