

Supplementary Table 1. Summary Analysis of the Contraction Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues Under No Drugs Added and in the Presence of Atropine

Hz	Control (No-drugs, n = 16)		W/W^V group 1 (No-drugs, n = 14)				W/W^V group 2 (No-drugs, n = 12)			
	AUC	Peak	AUC		Peak		AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.31 ± 0.03	0.40 ± 0.04	1.40 ± 0.13	*	0.27 ± 0.03	NS	3.71 ± 0.71	*** ###	1.03 ± 0.18	*** ###
2	0.45 ± 0.04	0.41 ± 0.05	2.12 ± 0.27	**	0.47 ± 0.04	NS	5.08 ± 0.79	*** ###	1.40 ± 0.18	*** ###
4	0.54 ± 0.10	0.46 ± 0.06	3.51 ± 0.44	**	0.78 ± 0.07	NS	6.43 ± 1.31	*** ##	1.69 ± 0.25	*** ###
8	1.04 ± 0.16	0.83 ± 0.28	8.16 ± 1.15	***	1.62 ± 0.23	NS	8.89 ± 2.23	*** NS	2.45 ± 0.37	** NS
16	2.71 ± 0.31	1.64 ± 0.23	14.09 ± 2.10	***	2.68 ± 0.42	NS	12.30 ± 3.33	** NS	3.32 ± 0.54	* NS
32	10.13 ± 0.67	3.60 ± 0.61	27.29 ± 2.34	***	5.21 ± 0.29	NS	20.19 ± 5.01	* NS	5.17 ± 0.71	NS NS

Hz	Control (Atropine, n = 8)		W/W^V group 1 (Atropine, n = 7)				W/W^V group 2 (Atropine, n = 6)			
	AUC	Peak	AUC		Peak		AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.28 ± 0.15	* #	0.17 ± 0.09	* #
2	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS	1.39 ± 0.84	NS NS	0.49 ± 0.23	* ##
4	0.00 ± 0.00	0.00 ± 0.00	0.27 ± 0.02	*	0.14 ± 0.02	*	0.42 ± 0.15	** NS	0.29 ± 0.07	*** #
8	0.00 ± 0.00	0.00 ± 0.00	0.27 ± 0.06	**	0.13 ± 0.01	**	0.08 ± 0.07	NS #	0.08 ± 0.05	* NS
16	0.00 ± 0.00	0.00 ± 0.00	0.29 ± 0.06	***	0.14 ± 0.02	***	0.05 ± 0.01	NS ###	0.09 ± 0.01	*** #
32	0.02 ± 0.01	0.03 ± 0.02	0.36 ± 0.14	*	0.14 ± 0.04	**	0.15 ± 0.02	NS NS	0.21 ± 0.01	*** NS

AUC, area under the curve.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05, ***P* < 0.01 and ****P* < 0.001. Control vs. W/W^V group 1, control vs. W/W^V group 2 (top) and W/W^V group 1 vs. W/W^V group 2 (bottom; each *P*-value represented by #).

Supplementary Table 2. Summary Analysis of the Contraction Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues in the Presence of L-NNA, Atropine and L-NNA Together

Hz	Control (L-NNA, n = 8)		W/W^V group 1 (L-NNA, n = 7)				W/W^V group 2 (L-NNA, n = 6)			
	AUC		AUC		Peak		AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	3.41 ± 0.81	0.73 ± 0.06	0.8 ± 0.1	*	0.08 ± 0.03	***	1.30 ± 0.37	NS	0.41 ± 0.09	**
								NS		##
2	8.36 ± 2.2	1.23 ± 0.13	1.13 ± 0.67	*	0.21 ± 0.08	***	2.74 ± 0.79	NS	0.62 ± 0.13	**
								NS		NS
4	13.63 ± 3.1	2.35 ± 0.22	3.21 ± 0.93	*	0.48 ± 0.1	***	8.35 ± 2.61	NS	1.74 ± 0.26	NS
								NS		##
8	32.85 ± 6.2	5.88 ± 0.64	10.63 ± 2.32	*	1.66 ± 0.41	***	24.30 ± 5.83	NS	4.90 ± 0.46	NS
								NS		##
16	53.96 ± 6.73	9.96 ± 1.01	19.53 ± 2.67	**	3.72 ± 1.1	***	47.31 ± 6.22	NS	9.56 ± 0.46	NS
								#		##
32	84.25 ± 7.64	16.50 ± 1.64	50.94 ± 4.94	**	7.42 ± 1.31	***	103.39 ± 5.60	NS	18.11 ± 1.53	NS
								###		##

Hz	Control (Atropine and L-NNA, n = 16)		W/W^V group 1 (Atropine and L-NNA, n = 14)				W/W^V group 2 (Atropine and L-NNA, n = 12)			
	AUC		AUC		Peak		AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS
2	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS
4	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS	0.00 ± 0.00	NS
8	0.14 ± 0.07	0.06 ± 0.03	0.24 ± 0.10	NS	0.08 ± 0.03	NS	1.19 ± 0.69	NS	0.10 ± 0.05	NS
								NS		NS
16	1.33 ± 0.38	0.28 ± 0.06	2.62 ± 0.77	NS	0.42 ± 0.15	NS	12.03 ± 1.79	***	0.49 ± 0.08	NS
								###		NS
32	4.32 ± 1.08	0.99 ± 0.19	13.42 ± 1.44	**	1.68 ± 0.6	NS	21.52 ± 3.77	***	0.97 ± 0.15	NS
								#		NS

L-NNA, *N*^ω-nitro-L-arginine; AUC, area under the curve.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05, ***P* < 0.01 and ****P* < 0.001. Control vs. W/W^V group 1, Control vs. W/W^V group 2 (top) and W/W^V group 1 vs. W/W^V group 2 (bottom; each *P*-value represented by #).

Supplementary Table 3. Summary Analysis of the Relaxation Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues No Drugs Added and in the Presence of Atropine

Hz	Control (No-drugs, n = 16)		W/W^V group 2 (No-drugs, n = 12)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.05 ± 0.03	0.07 ± 0.03	0.00 ± 0.00	NS	0.00 ± 0.00	* NS
2	2.09 ± 0.47	0.52 ± 0.09	0.53 ± 0.34	** NS	0.06 ± 0.04	*** NS
4	12.62 ± 1.21	1.01 ± 0.12	7.17 ± 1.60	** ###	0.43 ± 0.08	*** ##
8	29.20 ± 2.49	1.79 ± 0.18	19.62 ± 1.86	** ###	0.99 ± 0.12	*** ###
16	47.30 ± 3.08	2.40 ± 0.21	35.02 ± 3.63	** ###	1.57 ± 0.23	** ###
32	88.92 ± 8.78	2.93 ± 0.28	66.50 ± 9.74	* ###	2.26 ± 0.35	NS ###

Hz	Control (Atropine, n = 8)		W/W^V group 2 (Atropine, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.73 ± 0.13	0.28 ± 0.04	0.00 ± 0.00	*** NS	0.00 ± 0.00	*** NS
2	3.98 ± 0.76	0.52 ± 0.07	0.65 ± 0.35	*** NS	0.09 ± 0.05	*** NS
4	18.08 ± 2.33	0.96 ± 0.10	9.44 ± 3.10	* #	0.41 ± 0.11	*** ##
8	45.84 ± 6.50	2.03 ± 0.14	24.80 ± 5.69	* ##	1.30 ± 0.31	* ###
16	64.44 ± 6.40	2.61 ± 0.20	37.24 ± 7.65	** ###	1.73 ± 0.35	* ###
32	121.55 ± 11.40	3.22 ± 0.23	84.93 ± 15.6	* ###	2.45 ± 0.54	NS ###

AUC, area under the curve.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05, ***P* < 0.01 and ****P* < 0.001. Control vs. W/W^V group 2 (top) and W/W^V group 1 vs. W/W^V group 2 (bottom; each *P*-value represented by #).

Supplementary Table 4. Summary Analysis of the Relaxation Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues in the Presence of L-NNA, Atropine and L-NNA Together

Hz	Control (L-NNA, n = 8)		W/W^V group 2 (L-NNA, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
2	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
4	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
8	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
16	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
32	7.39 ± 0.8	1.00 ± 0.15	0.00 ± 0.00	***	0.00 ± 0.00	***
				NS		NS

Hz	Control (Atropine and L-NNA, n = 16)		W/W^V group 2 (Atropine and L-NNA, n = 12)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
2	0.00 ± 0.00	0.00 ± 0.00	0.00 ± 0.00	NS	0.00 ± 0.00	NS
4	0.02 ± 0.01	0.03 ± 0.02	0.00 ± 0.00	NS	0.00 ± 0.00	NS
8	0.03 ± 0.02	0.03 ± 0.02	0.00 ± 0.00	NS	0.00 ± 0.00	NS
16	0.04 ± 0.03	0.04 ± 0.03	0.00 ± 0.00	NS	0.00 ± 0.00	NS
32	7.76 ± 3.00	0.34 ± 0.13	0.00 ± 0.00	**	0.00 ± 0.00	**
				NS		NS

L-NNA, N^{ω} -nitro-L-arginine; AUC, area under the curve.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05, ***P* < 0.01 and ****P* < 0.001. Control vs. W/W^V group 2.

Supplementary Table 5. Summary Analysis of the Contraction Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues in the Presence of L-NNA Before Neostigmine

Hz	Control (No-drugs, n = 6)		W/W^V (No-drugs, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	1.07 ± 0.21	0.56 ± 0.08	3.90 ± 1.16	*	1.11 ± 0.23	*
2	1.04 ± 0.17	0.54 ± 0.07	5.30 ± 1.67	*	1.48 ± 0.36	*
4	1.32 ± 0.25	0.75 ± 0.10	5.99 ± 2.07	*	1.69 ± 0.37	*
8	3.49 ± 0.59	1.80 ± 0.25	8.59 ± 2.29	*	3.15 ± 0.71	NS
16	9.27 ± 1.08	3.20 ± 0.56	14.85 ± 2.09	*	4.08 ± 1.01	NS
32	24.86 ± 1.99	7.26 ± 1.12	34.38 ± 3.29	*	9.72 ± 1.44	NS

Hz	Control (L-NNA, n = 6)		W/W^V (L-NNA, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	4.06 ± 0.84	1.29 ± 0.22	1.17 ± 0.64	*	0.32 ± 0.08	**
2	5.95 ± 0.91	1.48 ± 0.20	3.12 ± 0.80	*	0.58 ± 0.13	**
4	21.2 ± 3.64	3.19 ± 0.42	7.52 ± 1.75	**	1.53 ± 0.20	**
8	33.50 ± 4.83	8.22 ± 0.96	20.19 ± 3.23	*	4.38 ± 0.32	**
16	64.38 ± 7.33	14.40 ± 1.53	44.49 ± 4.19	*	8.02 ± 0.45	**
32	101.5 ± 20.07	21.13 ± 2.60	94.65 ± 14.2	NS	15.41 ± 0.99	NS

AUC, area under the curve; L-NNA, *N*^ω-nitro-l-arginine.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05 and ***P* < 0.01. Control vs. W/W^V .

Supplementary Table 6. Summary Analysis of the Contraction Component (AUC, Peak) of the Electrical Field Stimulation Induced Mechanical Response From Control and W/W^V Fundus Tissues in the Presence of Neostigmine

Hz	Control (Neostigmine, n = 6)		W/W^V (Neostigmine, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	204.20 ± 7.38	12.18 ± 0.43	304.70 ± 31.00	**	21.52 ± 1.86	***
2	327.60 ± 9.33	16.75 ± 0.39	434.70 ± 41.50	*	25.77 ± 2.36	***
4	615.80 ± 55.30	21.16 ± 0.85	915.20 ± 116.20	*	31.94 ± 2.99	***
8	910.40 ± 67.40	31.09 ± 1.67	1308.80 ± 126.90	**	39.88 ± 3.24	*
16	1365.70 ± 57.90	35.18 ± 1.17	1739.30 ± 200.60	**	42.55 ± 3.03	*
32	1419.00 ± 35.60	36.49 ± 1.44	2471.10 ± 323.10	***	45.51 ± 3.46	*

Hz	Control (Neostigmine and Atropine, n = 6)		W/W^V (Neostigmine and Atropine, n = 6)			
	AUC	Peak	AUC		Peak	
	Mean	Mean	Mean	<i>P</i> -value	Mean	<i>P</i> -value
1	0	0	0	NS	0	NS
2	0	0	0	NS	0	NS
4	0	0	0	NS	0	NS
8	0	0	0.44 ± 0.18	*	0.06 ± 0.01	***
16	2.12 ± 1.65	0.38 ± 0.38	1.01 ± 0.47	NS	0.12 ± 0.03	NS
32	10.32 ± 4.37	1.33 ± 0.59	4.42 ± 1.44	NS	0.26 ± 0.06	NS

AUC, area under the curve.

“n” represent number of animals, *P*-values indicated as not significant (NS), **P* < 0.05, ***P* < 0.01 and ****P* < 0.001. Control vs. W/W^V .