

Supplementary Materials 1.

1.1 Risk factors for postoperative infection

Univariable analysis revealed that closure mode, lesion diameter, duration of operation and pathological was related to the occurrence of postoperative infection.

Supplementary Table 1 Univariate logistic regression analysis of risk factors for postoperative infection

Factor	Postoperative infection (n=26)	No postoperative infection (n=64)	<i>P</i>	OR	95%CI
Sex [n (%)]			0.202	1.82	0.725-4.568
Male	14 (53.85%)	25 (39.06%)			
Female	12 (41.15%)	39 (60.94%)			
Age[n (%)]	59.50 (53.75, 63)	56.50 (46.25, 62.75)	0.349	1.018	0.981-1.057
Method of closure[n (%)]			0.01	0.269	0.099-0.730
Interrupted closure	7 (26.92%)	37 (57.81%)			
Traditional closure	19 (73.08%)	27 (42.18%)			
Lesion location[n (%)]					
Fundus of stomach	11 (42.31%)	33 (51.56%)	0.679		
Gastric body	13 (50.00%)	28 (43.75%)	0.493	1.393	0.540-3.594
Antrum of stomach	2 (7.69%)	3 (4.69%)	0.478	2	0.295-13.573
Maximum lesion diameter[M, (Q1, Q3), mm]	19.00 (10.00, 31.25)	11.85 (8.50, 17.50)	0.002	1.071	1.026-1.118
Pathological type[n (%)]					
Leiomyoma	1 (3.85%)	15 (23.44%)	0.353		
Stromal tumor	21 (80.77%)	38 (59.38%)	0.045	8.514	1.049-69.098
Ectopiapancreas	1 (3.85%)	2 (3.13%)	0.209	7.5	0.325-173.282
Neurofibroma	1 (3.85%)	4 (6.25%)	0.385	3.75	0.190-74.065

Other	2 (7.69%)	5 (7.81%)	0.178	6	0.443-81.196
Level of origin of lesion [n (%)]			0.655	0.6	0.064-5.638
Not reaching muscularis propria	1 (3.85%)	4 (6.25%)			
Muscularis propria	25 (96.15%)	60 (93.75%)			
Growth pattern[n (%)]					
Intraluminal growth	3 (11.54%)	3 (4.69%)	0.506		
Extraluminal growth	1 (3.85%)	2 (3.13%)	0.638	0.5	0.028-8.952
Intraluminal and extraluminal growth	22 (84.62%)	59 (92.19%)	0.248	0.373	0.070-1.988
Intraoperative traction [n (%)]			0.907	0.938	0.296-2.949
Yes	5 (19.23%)	13 (20.31%)			
No	21 (80.77%)	51 (79.69%)			
Operative Time [M, (Q1, Q3), min]	42.50 (26.50, 68.00)	27.00 (20.00, 33.00)	0.002	1.052	1.018-1.087

Multivariable analysis revealed that the interrupted closure method served as an independent protective factor against postoperative infection, operation time and stromal tumor are risk factors for postoperative infection($P < 0.05$).

Supplementary Table 2 Multifactorial logistic regression analysis of risk factors for of postoperative infection

Variables	β	S.E	wald χ^2	P	OR	95%CI
Operative Time	0.052	0.026	3.988	0.046	1.054	1.001-1.110
Method of closure	-1.379	0.694	3.951	0.047	0.252	0.065-0.981
Maximum lesion diameter	0.048	0.04	1.47	0.225	1.049	0.971-1.134
Pathological type Leiomyoma			6.297	0.178		

Stromal tumor	2.281	1.158	3.878	0.049	9.791	1.011-94.826
Ectopiapancreas	-0.221	3.669	0.004	0.952	0.802	0.001-1064.102
Neurofibroma	-2.166	3.196	0.595	0.440	0.085	0-44.658
Other	0.871	1.538	0.321	0.571	2.39	0.117-48.676

1.2 Risk factors for gas-related complications

Univariable analysis revealed that closure method, pathological, and surgical time was related to the occurrence of gas-related complications.

Supplementary Table 3 Univariate logistic regression analysis of risk factors for gas-related complications

Factor	gas-related complications (n=13)	No gas-related complications (n=77)	P	OR	95%CI
Sex [n (%)]			0.16	0.421	0.126-1.408
Male	8 (61.54%)	31 (40.26%)			
Female	5 (38.46%)	46 (59.74%)			
Age[n (%)]	55.0(46.5,64.0)	58.0(49.0,62.5)	0.949	1.001	0.957-1.048
Method of closure[n (%)]			0.011	0.066	0.008-0.532
Interrupted closure	1 (7.69%)	43 (55.84%)			
Traditional closure	12 (92.31%)	34 (44.16%)			
Lesion location[n (%)]					
Fundus of stomach	4 (30.77%)	40 (51.95%)	0.384		
Gastric body	8 (61.54%)	33 (42.86%)	0.177	2.424	0.670-8.769
Antrum of stomach	1 (7.69%)	4 (5.19%)	0.458	2.5	0.222-28.125
Maximum lesion	15.0(11.0,27.5)	12.0(10,20)	0.237	1.028	0.982-1.077

diameter[M, (Q1, Q3), mm]					
Pathological type[n (%)]					
Leiomyoma	1 (7.69%)	15 (19.48%)	0.049		
Stromal tumor	6 (46.15%)	53(68.83%)	0.624	1.731	0.193-15.520
Ectopiapancreas	1 (7.69%)	2(2.60%)	0.209	7.5	0.325-173.283
Neurofibroma	1 (7.69%)	4(5.19%)	0.385	3.7	0.19-74.065
Other	4 (30.77%)	3(3.90%)	0.02	20	1.613-247.981
Level of origin of lesion [n (%)]			0.999	0	0
Not reaching muscularis propria		0 5(6.5%)			
Muscularis propria	13 (100%)	72(93.5%)			
Growth pattern[n (%)]					
Intraluminal growth	1 (7.7%)	5(6.49%)	0.652		
Extraluminal growth	1 (7.7%)	2(2.60%)	0.577	2.5	0.1-62.605
Intraluminal and extraluminal growth	11 (84.62%)	70(90.91%)	0.833	0.786	0.084-7.374
Intraoperative traction [n (%)]			0.082	3.077	0.867-10.918
Yes	5 (38.46%)	13(16.88%)			
No	8 (61.54%)	64(83.12%)			
Operative Time [M, (Q1, Q3), min]	51(30.0,95.0)	28.0(20.0,38.5)	0.003	1.03	1.010-1.050

Multivariable analysis revealed that the interrupted closure method served as an independent protective factor against gas-related complications, the pathological type

was other is risk factor for postoperative infection($P < 0.05$).

**Supplementary Table 4 Multifactorial logistic regression analysis of risk factors for
of gas-related complications**

Variables	β	S.E	wald χ^2	P	OR	95%CI
Operative Time	0.021	0.011	3.616	0.057	1.022	0.999-1.044
Method of closure	-2.985	1.305	5.232	0.022	0.051	0.004-0.652
Pathological type						
Leiomyoma			6.649		0.156	
Stromal tumor	-0.036	1.189	0.001	0.976	0.964	0.094-9.912
Ectopiapancreas	1.765	2.646	0.445	0.505	5.843	0.033-1045.058
Neurofibroma	0.302	1.972	0.023	0.878	1.352	0.028-64.563
Other	3.218	1.6	4.046	0.044	24.983	1.086-574.882