

Table 1 Patient demographics, surgical outcomes and lesion characteristics of both groups

Characteristics	RYOA (<i>n</i> = 37)	EGPP (<i>n</i> = 36)	DT (<i>n</i> = 31)	<i>P</i> value
<i>Patient demographics</i>				
Age (years) ^a	52 (35-73)	56.5 (36-75)	54 (33-74)	0.640
Gender (n): male/female ^b	23/14	21/15	17/14	0.829
Body mass index (BMI, kg/m ²) ^c	23.2 ± 2.9	24.8 ± 3.9	24.9 ± 3.8	0.075
<i>Surgical outcomes</i> ^c				
Operative duration (min)	122.6 ± 16.9	114.8 ± 13.0	133.4 ± 17.1 ^{i,ii}	0.000*
Reconstruction duration (min)	33.9 ± 3.6	29.4 ± 3.7	43.0 ± 7.0 ^{i,ii}	0.000*
Blood loss (mL)	105.4 ± 28.9	99.4 ± 34.5	103.8 ± 28.6	0.691
Time to first flatus (d)	3.1 ± 0.8	3.1 ± 0.7	3.5 ± 0.9	0.110
Postoperative hospital stay (d)	8.3 ± 1.2	8.2 ± 1.4	9.2 ± 1.5 ^{i,ii}	0.009*
<i>Lesion pathologic findings</i>				
Diameters (cm) ^c	2.1 ± 0.7	2.0 ± 0.5	2.2 ± 0.5	0.518
Type (n): GIST/Ulcer/leiomyomas ^b	20/9/8	19/11/6	17/6/8	0.822

^a Data are presented as the median with the range in parentheses

^b Data are presented as n of the corresponding group

^c Data are presented as the mean ± SD

* The differences between three groups have statistically significant (*P* < 0.05)

ⁱ Compared to RYOA group, the difference was statistically significant (*P* < 0.017)

ⁱⁱ Compared to EGPP group, the difference was statistically significant (*P* < 0.017)

Table 2 Postoperative outcomes

Characteristics	RYOA (<i>n</i> = 37)	EGPP (<i>n</i> = 36)	DT (<i>n</i> = 31)	<i>P</i> value
<i>Short-term complication (%)</i>	5.4	5.6	9.7	0.789
Digestive tract hemorrhage (<i>n</i>)	1	0	1	0.576
Intraabdominal hernia (<i>n</i>)	0	1	0	0.385
Incision infection (<i>n</i>)	0	1	1	0.564
Pulmonary infection (<i>n</i>)	1	0	1	0.576
<i>Long-term complication (%)</i>	13.5	44.4 ⁱ	22.6	0.010*
Anastomotic stenosis (<i>n</i>)	2	1	1	1.000
Delayed gastric emptying	0	1	1	0.537
Reflux esophagitis (<i>n</i>)	2	8	1	0.029*
Bile reflux gastritis (<i>n</i>)	0	6 ⁱ	4	0.018*
<i>Ratio of weight (%): postoperative (6 months)/preoperative</i>	92.4 ± 7.9	86.8 ± 9.8 ⁱ	89.9 ± 9.6	0.036*

* The differences between three groups have statistically significant ($P < 0.05$)

ⁱ Compared to RYOA group, the difference was statistically significant ($P < 0.017$)

Table 3 Postoperative digestive symptoms: EORTC QLQ-STO22 scores ^a

Characteristics	RYOA (<i>n</i> = 37)	EGPP (<i>n</i> = 36)	DT (<i>n</i> = 31)	<i>P</i> value
Dysphagia	0 (0-55.6)	5.55 (0-66.7)	0 (0-66.7)	0.846
Pain	0 (0-25)	4.15 (0-33.3)	8.3 (0-33.3)	0.410
Reflux symptoms	0 (0-66.7)	27.75 (0-88.9) ⁱ	22.2 (0-77.8) ⁱ	0.000*
Eating restrictions	8.3 (0-33.3)	8.3 (0-41.7)	8.3 (0-41.7)	0.442
Anxiety	0 (0-22.2)	0 (0-22.2)	0 (0-22.2)	0.211
Dry mouth	0 (0-33.3)	0 (0-33.3)	0 (0-33.3)	0.998
Taste	0 (0-33.3)	0 (0-33.3)	0 (0-33.3)	0.595
Body image	0 (0-0)	0 (0-33.3)	0 (0-33.3)	0.223
Hair loss	0 (0-0)	0 (0-0)	0 (0-0)	1.000

^a All data are presented as the median with the range in parentheses

* The differences between three groups have statistically significant ($P < 0.05$)

ⁱ Compared to RYOA group, the difference was statistically significant ($P < 0.017$)

Table 4 Postoperative quality of life: EORTC QLQ-C30 scores

Characteristics	RYOA (<i>n</i> = 37)	EGPP (<i>n</i> = 36)	DT (<i>n</i> = 31)	<i>P</i> value
<i>Global health</i> ^c	92.6 ± 10.5	79.2 ± 14.8 ⁱ	80.4 ± 14.8 ⁱ	0.000*
<i>Functional scales</i> ^c				
Physical functioning	96.2 ± 5.1	95.5 ± 5.0	95.0 ± 5.2	0.634
Role functioning	90.5 ± 12.7	77.8 ± 17.4 ⁱ	79.6 ± 17.0 ⁱ	0.002*
Emotional functioning	81.3 ± 6.0	78.5 ± 8.8	78.2 ± 9.3	0.268
Cognitive functioning	80.2 ± 12.9	80.6 ± 13.5	80.6 ± 13.0	0.988
Social functioning	84.2 ± 14.1	76.4 ± 17.5	75.3 ± 16.6	0.037*
<i>Symptom scales</i>				
Fatigue ^c	15.3 ± 9.6	18.5 ± 10.6	17.5 ± 11.0	0.405
Nausea and vomiting ^a	0 (0-33.3)	16.7 (0-33.3) ⁱ	16.7 (0-33.3)	0.012*
Pain ^a	0 (0-33.3)	0 (0-33.3)	0 (0-33.3)	0.930
<i>Single scales</i> ^a				
Dyspnea	0 (0-33.3)	0 (0-33.3)	0 (0-33.3)	0.713
Insomnia	0 (0-66.7)	0 (0-66.7)	0 (0-66.7)	0.738
Appetite loss	0 (0-66.7)	0 (0-66.7)	0 (0-66.7)	0.248
Constipation	0 (0-66.7)	0 (0-33.3)	0 (0-33.3)	0.991
Diarrhea	0 (0-33.3)	0 (0-66.7)	0 (0-66.7)	0.883
Financial difficulties	0 (0-0)	0 (0-0)	0 (0-0)	1.000

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