Supplementary Online Content

Zhao S, Zhang L, Gao F, et al. Transanal drainage tube use for preventing anastomotic leakage prevention after laparoscopic low anterior resection in patients with rectal cancer: a randomized clinical trial. *JAMA Surg*. Published online October 6, 2021. doi:10.1001/jamasurg.2021.4568

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Demographic and Surgical Characteristics of the Patients in Each Subgroup

Characteristics	Without DS		With DS	
	TDT group (n=208)	Non-TDT group (n=191)	TDT group (n=72)	Non-TDT group (n=89)
Age (years) (median, (IQR))	62 (54-68.75)	62 (52-67)	60 (52-68.75)	61 (51.5-72)
Sex				
Male	128	109	49	60
Female	80	82	23	29
BMI (kg/m^2) (median, (IQR))	22.8 (20.8-24.62)	22.8 (20.76-25.46)	23.44 (20.77-24.68)	23.0 (20.45-24.81)
≥ 25	46	59	15	21
< 25	162	132	57	68
DM	21	17	5	12
Neoadjuvant chemotherapy	8	13	4	3
Tumor location from anal verge (cm)				
Median, (IQR)	7 (6-9)	8 (6-9)	6 (5-7)	6 (5-8)
Mean± SD	7.41± 1.78	7.63± 1.91	6.29± 1.91	6.16± 1.98
Operation time (min) (median, (IQR))	170 (120-213.75)	165 (120-235)	184.5 (151.25-235)	190 (150-230)
Blood loss				
Median, (IQR) (ml)	50 (30-80)	50 (20-80)	50 (50-100)	50 (50-100)
Mean± SD (ml)	62.96± 49.63	57.95± 45.49	79.72± 88.97	93.93± 180.56
≥ 50 ml	150	117	58	70
< 50 ml	58	74	14	19
Anastomotic level (cm) (median, (IQR))	4.5 (3.5-5)	5 (4-6)	4 (2.5-5)	3.5 (2.5-5)
≥ 5 cm	102	107	19	23
< 5 cm	106	84	53	66
Number of stapler firings				
= 1	53	39	9	8
> 1	155	152	63	81

Abbreviations: DM: diabetes mellitus, BMI: body mass index, DS: diverting stoma, AL: anastomotic leakage, TDT: transanal drainage tube.

eTable 2. Demographic and Surgical Characteristics of the Patients (Per-Protocol Analysis)

Characteristics	TDT group (n=279)	Non-TDT group (n=279)
Age (years) (median, (IQR))	61 (54-68)	62 (52-69)
Sex		
Male (n, %)	176 (63.1%)	169 (60.6%)
Female (n, %)	103 (36.9%)	110 (39.4%)
BMI (kg/m²) (median, (IQR))	23.10 (20.8 -24.63)	22.84 (20.76-25.21)
≥ 25 (n)	61	80
< 25 (n)	218	199
DM (n, %)	26 (9.3%)	29 (10.4%)
Neoadjuvant chemotherapy (n, %)	12 (4.3%)	16 (5.7%)
Tumor location from anal verge (cm)		
Median, (IQR)	7 (6-8)	7 (5.5-9)
Mean± SD	7.13± 1.87	7.16± 2.05
Operation time (min) (median, (IQR))	180 (130-220)	175 (130-230)
Blood loss		
Median, (IQR) (ml)	50 (40-100)	50 (25-100)
Mean± SD (ml)	67.40± 62.49	69.42± 109.62
≥ 50 ml (n)	208	186
< 50 ml (n)	71	93
Anastomotic level (cm) (median, (IQR))	4 (3-5)	4 (3-5.5)
≥ 5 cm (n)	121	130
< 5 cm (n)	158	149
Number of stapler firings		
= 1 (n)	62	47
> 1 (n)	217	232
DS		
Absent (n)	207	190
Present (n, %)	72 (25.8%)	89 (31.9%)

Abbreviations: DM: diabetes mellitus, BMI: body mass index, DS: diverting stoma, AL: anastomotic leakage, TDT: transanal drainage tube.

Endpoint	TDT group (n=279)	Non-TDT group (n=279)	*P*-value	RR	95% CI
eTable 3. The Details of Anastomotic Leakage (Per-Protocol Analysis)					
AL (n, %)	18 (6.5%)	19 (6.8%)	0.87	0.947	0.508-1.766
Grade B (n)	14	11	0.43		
Grade C (n)	4	8			
Abbreviations: RR: relative risk, CI: confidence interval.					

eTable 4. Anastomotic Leakage in Each Subgroup Based on the Presence or Absence of a Diverting Stoma (Per-Protocol Analysis)

Leakage	With a diverting stoma			Without a diverting stoma		
	TDT group (n=72)	Non-TDT group (n=89)	*P*-value	TDT group (n=207)	Non-TDT group (n=190)	*P*-value
Present (n, %)	6 (8.3%)	4 (4.5%)	0.50	12 (5.8%)	15 (7.9%)	0.41
Grade B (n, %)	6 (8.3%)	4 (4.5%)		8 (3.9%)	7 (3.7%)	
Grade C (n, %)	0	0		4 (1.9%)	8 (4.2%)	

eTable 5. Demographic and Surgical Characteristics of the Patients in Each Subgroup (Per-Protocol Analysis)

Characteristics	Without DS		With DS	
	TDT group (n=207)	Non-TDT group (n=190)	TDT group (n=72)	Non-TDT group (n=89)
Age (years) (median, (IQR))	62 (54-68)	62 (52-67.25)	60 (52-68.75)	61 (51.5-72)
Sex				
Male	127	109	49	60
Female	80	81	23	29
BMI (kg/m^2) (median, (IQR))	22.8 (20.8-24.63)	22.82 (20.77-25.52)	23.44 (20.77-24.68)	23.0 (20.45-24.81)
≥ 25	46	59	15	21
< 25	161	131	57	68
DM	21	17	5	12
Neoadjuvant chemotherapy	8	13	4	3
Tumor location from anal verge (cm)				
Median, (IQR)	7 (6-9)	8 (6-9)	6 (5-7)	6 (5-8)
Mean± SD	7.42± 1.77	7.63± 1.91	6.29± 1.91	6.16± 1.98
Operation time (min) (median, (IQR))	170 (120-215)	165 (120-235)	184.5 (151.25-235)	190 (150-230)
Blood loss				
Median, (IQR) (ml)	50 (30-80)	50 (20-80)	50 (50-100)	50 (50-100)
Mean± SD (ml)	63.12± 49.7	57.94± 45.61	79.72± 88.97	93.93± 180.56
≥ 50 ml	150	116	58	70
< 50 ml	57	74	14	19
Anastomotic level (cm) (median, (IQR))	4.5 (3.5-5)	5 (4-6)	4 (2.5-5)	3.5 (2.5-5)
≥ 5 cm	102	107	19	23
< 5 cm	105	83	53	66
Number of stapler firings				
= 1	53	39	9	8
> 1	154	151	63	81

Abbreviations: DM: diabetes mellitus, BMI: body mass index, DS: diverting stoma, AL: anastomotic leakage, TDT: transanal drainage tube.