Supplementary materials

Table S1

28-items questionnaire.

Age	(1) 25-35 (2) 36-45 (3) >45
Number of gastrectomies performed	(1) <20 (2) 20-50 (3) >50
Number of gastrectomies performed in your unit in 2018 (01/01/2018-31/12/18) *please record the total number of procedures performed by all surgeons in your unit	(1) <20 (2) 20-30 (3) >30
Is your unit equipped with a 24-hour consultant/attending on call doctor for gastroesophageal emergencies?	(1) None (2) Weekdays Daytime e.g. 08:00-17:00 (3) Weekdays 24 hours (4) Every day Daytime e.g. 08:00-17:00 (5) Every day 24 hours
Is your hospital equipped with a 24-hour on call doctor for interventional radiology?	(1) None (2) Weekdays Daytime e.g. 08:00-17:00 (3) Weekdays 24 hours (4) Every day Daytime e.g. 08:00-17:00 (5) Every day 24 hours
Is your hospital equipped with a 24-hour on call doctor for interventional endoscopy?	(1) None (2) Weekdays Daytime e.g. 08:00-17:00 (3) Weekdays 24 hours (4) Every day Daytime e.g. 08:00-17:00 (5) Every day 24 hours
Which is the routine postoperative destination of a patient after gastrectomy? *Step Down Units (level 2 care) are an intermediary level of care between a general surgical ward and intensive care units.	(1) Ward (2) Step Down Unit* (3) Intensive Care Unit (4) Other
Does your unit have a formalized ERAS (Enhanced Recovery After Surgery) protocol for gastrectomy?	(1) Yes (2) No
Which is your preferred technique to perform the esophago-jejunal anastomosis?	(1) Handsewn (2) Circular Stapled (3) OrVil™ (4) Stapled side-to-side with suturing (Orringer style) (5) Other (6) Not Applicable- do not perform
Which is your preferred technique to perform the gastro-jejunal anastomosis?	(1) Handsewn (2) Circular Stapled (3) OrVil™ (4) Stapled side-to-side with suturing (Orringer style) (5) Other (6) Not Applicable- do not perform
Does you unit have access to Indigo-Cyanine Green intraoperative assessment?	(1) Yes (2) No
Does your unit perform a routine (even if no concerns) intra-operative assessment of the anastomosis (Blue-Test or Pneumatic Test)?	(1) Yes (2) No
Do you routinely place at least one prophylactic abdominal drain in total gastrectomy?	(1) Yes (2) No
If yes, how many drains do you routinely use?	(1) 1 (2) 2 (3) > 2

Do you routinely place at least one prophylactic abdominal drain in subtotal gastrectomy?	(1) Yes (2) No
If yes, how many drains do you routinely use?	(1) 1 (2) 2 (3) > 2
Where do you usually place the drain/s? * Please mark all that apply	(1) perinastomotic (2) duodenal stump (3) other (specify)
Which type of drain do you routinely use?	(1) open (2) close passive (3) close active
How many days do you leave in place the prophylactic abdominal drain if no complication occurs?	(1) <= 3 days (2) 4-6 days (3) > 6 days
Do you routinely perform a post-operative assessment of the anastomosis before drain is removed?	(1) Yes (2) No
If yes, do you routinely perform the assessment only in total gastrectomy?	(1) Yes (2) No
When is the assessment performed? *please indicate the postoperative day	
Which exam do you usually use to assess the anastomosis? * Please mark all that apply	(1) Barium/Water soluble contrast swallow (2) Computed Tomography (CT) (3) Endoscopy (4) Other
Which of the following techniques for anastomotic leak treatment are available in your unit? * Please mark all that apply	(1) Parenteral Nutrition (2) Endoscopic clips (3) Endoscopic/radiologically placed covered stent (4) EndoVac/Endosponge therapy (5) Interventional guided drainage of abdominal/thoracic collections
Do you think that prophylactic drain is the main tool for **anastomotic leak diagnosis**? (0=completely disagree; 5=completely agree)	0 – 1 – 2 – 3 – 4 - 5
Do you think that prophylactic drain is the main tool for **anastomotic leak treatment**? (0=completely disagree; 5=completely agree)	0 – 1 – 2 – 3 – 4 - 5
Do you think that prophylactic drain is the main tool for **duodenal stump leak diagnosis**? (0=completely disagree; 5=completely agree)	0 – 1 – 2 – 3 – 4 - 5
Do you think that prophylactic drain is the main tool for **duodenal stump leak treatment**? (0=completely disagree; 5=completely agree)	0 – 1 – 2 – 3 – 4 - 5

Table S2

Comparison of hospital facilities between "drain" and "no drain" surgeons for total and subtotal gastrectomy. Data are reported as number (percentage).

	Tot	Drain in total gastrectomy			Drain in subtotal gastrectomy		
	n = 104	Yes n=102	No n=2	p value	Yes n=97	No n=7	p value
24-hour on call doctor for gastroesophageal emergencies				1.000			1.000
None	11 (11)	11 (11)	0		11 (11)	0	
Weekdays Daytime e.g. 08:00-17:00	5 (4)	5 (5)	0		5 (5)	0	
Every day 24 hours	88 (85)	86 (84)	2 (100)		81 (84)	7 (100)	
24-hour on call doctor for interventional radiology				1.000			0.650
None	14 (13.5)	14 (13.7)	0		14 (14)	0	
Weekdays Daytime e.g. 08:00-17:00	14 (13.5)	14 (13.7)	0		14 (14)	0	
Weekdays 24 hours	3 (3)	3 (3)	0		3 (3)	0	
Every day Daytime e.g. 08:00-17:00	4 (4)	4 (4)	0		4 (4)	0	
Every day 24 hours	69 (66)	67 (65.7)	2 (100)		62 (65)	7 (100)	
24-hour on call doctor for interventional endoscopy				1.000			1.000
None	2 (2)	2 (2)	0		2 (2)	0	
Weekdays Daytime e.g. 08:00-17:00	6 (6)	6 (6)	0		6 (6)	0	
Every day Daytime e.g. 08:00-17:00	2 (2)	2 (2)	0		2 (2)	0	
Every day 24 hours	94 (90)	92 (90)	2 (100)		87 (90)	7 (100)	
Routine postoperative destination of a patient after gastrectomy				1.000			**0.006**
Ward	60 (58)	58 (57)	2 (100)		58 (60)	2 (29)	
Step Down Unit	18 (17)	18 (18)	0		13 (13)	5 (71)	
Intensive Care Unit (ICU)	25 (24)	25 (24)	0		25 (26)	0	
Other	1 (1)	1 (1)	0		1 (1)	0	
Formalized ERAS protocol for gastrectomy				0.177			**0.002**
Yes	44 (42)	42 (41)	2 (100)		37 (38)	7 (100)	
No	60 (58)	60 (59)	0		60 (62)	0	
Intraoperative Indigo-Cyanine Green availability				0.502			0.697
Yes	44 (42)	56 (55)	2 (100)		55 (57)	3 (43)	
No	60 (58)	46 (45)	0		42 (43)	4 (57)	
Routine intraoperative assessment of the anastomosis				0.514			1.000
Yes	58 (56)	60 (59)	2 (100)		58 (60)	4 (57)	
No	46 (44)	42 (41)	0		39 (40)	3 (43)	
*Technique/s available to treat anastomotic leak**							
Parenteral Nutrition	104 (100)	102 (100)	2 (100)	---	97 (100)	7 (100)	---
Endoscopic clips	100 (96)	98 (96)	2 (100)	1.00	93 (96)	7 (100)	1.00
Endoscopic/radiologically placed covered stent	99 (95)	97 (95)	2 (100)	1.00	92 (95)	7 (100)	1.00
EndoVac/Endosponge therapy	44 (42)	42 (41)	2 (100)	0.177	37 (38)	7 (100)	**0.002**
Interventional guided drainage of abdominal/thoracic collections	101 (97)	99 (97)	2 (100)	1.00	94 (97)	7 (100)	1.00

***** mark all that apply

Significant values are highlighted in bold

Table S3

Perceived role of abdominal drain in anastomotic and duodenal leaks diagnosis and treatment, according to surgeon's age, experience and unit volume. Data are reported as number (percentage).

	Tot	**Age**				**Experience**				**Volume**			
	n=104	25-35 n=12	36-45 n=31	>45 n=61	p value	<20 n=29	20-50 n=22	>50 n=53	p value	<20 n=36	20-30 n=27	>30 n=41	p value
Drain is the main tool for anastomotic leak diagnosis					**0.048**				**0.017**				0.310
completely disagree	38 (37)	3 (25)	17 (55)	18 (30)		13 (45)	3 (13)	22 (42)		13 (36)	8 (30)	17 (42)	
partially in agreement	43 (41)	8 (67)	10 (32)	25 (40)		14 (48)	12 (55)	17 (32)		12 (33)	12 (44)	19 (46)	
completely agree	23 (22)	1 (8)	4 (13)	18 (30)		2 (7)	7 (32)	14 (26)		11 (31)	7 (26)	5 (12)	
Drain is the main tool for anastomotic leak treatment					0.052				0.917				0.395
completely disagree	30 (29)	2 (17)	14 (45)	14 (23)		10 (35)	5 (23)	15 (28)		8 (22)	6 (22)	16 (39)	
partially in agreement	52 (50)	7 (58)	15 (49)	30 (49)		14 (48)	12 (54)	26 (49)		18 (50)	16 (59)	18 (44)	
completely agree	22 (21)	3 (25)	2 (6)	17 (28)		5 (17)	5 (23)	12 (23)		10 (28)	5 (19)	7 (17)	
Drain is the main tool for duodenal stump leak diagnosis					0.052				**0.008**				**0.017**
completely disagree	31 (30)	2 (16.7)	14 (45)	15 (25)		9 (31)	2 (9)	20 (38)		10 (28)	3 (11)	18 (44)	
partially in agreement	29 (28)	7 (58.3)	6 (19)	16 (26)		13 (45)	6 (27)	10 (19)		12 (33)	6 (22)	11 (27)	
completely agree	44 (42)	3 (25.0)	11 (36)	30 (49)		7 (24)	14 (64)	23 (43)		14 (39)	18 (67)	12 (29)	
Drain is the main tool for duodenal stump leak treatment					0.534				0.279				**0.002**
completely disagree	21 (20)	1 (8)	8 (26)	12 (20)		4 (14)	2 (9)	15 (28)		5 (14)	3 (11)	13 (32)	
partially in agreement	35 (34)	6 (50)	11 (35)	18 (30)		12 (41)	7 (32)	16 (30)		19 (53)	4 (15)	12 (29)	
completely agree	48 (46)	5 (42)	12 (39)	31 (50)		13 (45)	13 (59)	22 (42)		12 (33)	20 (74)	16 (39)	

Significant values are highlighted in bold